MONITOR

Canadian Centre for Policy Alternatives, November/December 2015

CANADA AND CLIMATE CHANGE

November/December 2015

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CANADA AND CLIMATE CHANGE

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MONITOR

VOL. 22, NO. 4
ISSN 1198-497X
CANADA POST PUBLICATION 40009942

CCPA MONITOR IS PUBLISHED SIX TIMES A YEAR BY THE CANADIAN CENTRE FOR POLICY ALTERNATIVES.

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Editorial

Stuart Trew

End of an era

THE LONGEST ELECTION in Canadian memory has produced a new government and a decisive end to the Harper era. The reasons are not especially complicated: Canadians demanded change in Ottawa, and an end to the "politics of fear and divisiveness," as Liberal leader Justin Trudeau told us repeatedly along the 78-day campaign. Polls throughout this time consistently backed him up. The question, until close to election day, was which of the main opposition parties—the Liberals or the New Democratic Party—could reasonably provide that change by defeating the Conservatives. Canadians answered it by giving Prime Minister Trudeau a majority in Parliamentt.

The NDP entered the election in the lead. But an overly cautious campaign by leader Thomas Mulcair, a former Liberal environment minister in Quebec's provincial government, failed to excite new voters while turning off a good portion of the party's base. Mulcair was criticized for running to Trudeau's right on some issues, despite having the more progressive platform. Instead of highlighting the party's plans for a badly needed national pharmacare program he chose to front cuts to small business taxes. On climate change he was timid, endorsing an ineffective carbon trading scheme and wobbling between support for and opposition to a controversial east-west pipeline that would—if it is ever built, which is doubtful—carry Alberta bitumen to Atlantic ports for export.

The NDP did at times highlight its promises to create thousands of new affordable child care spaces and raise the federal minimum wage to $15 an hour. But these and other pledges were bogged down in the usual media skepticism about where the money would come from, especially with the party saying it would balanced the budget in 2016. Frustratingly, for NDP supporters, Mulcair's fiscal prudence was ridiculed by some of the same voices in the media once Trudeau took a page from Ontario Premier Kathleen Wynne's election playbook by asserting the Liberals would run deficits to pay for their platform, profiting from historically low interest rates.

Liberal and NDP support in the polls reversed at this point, putting the centrists within reach of the Conservatives and giving Trudeau the freedom to embrace deficit spending (up to $10 billion annually for three years) as a means of stimulating the stagnant Canadian economy. About a third of the new money is slated for social and green infrastructure, and new transit projects—staple proposals of progressive economists, including the CCPA.

On one level this is classic Liberal strategy: when in danger, run from the left (then govern from the right). We can look for proof to Ontario, where Premier Wynne is privatizing part of the public energy grid and has embraced public-private partnerships for transit and other infrastructure. But at the same time there are good reasons to take Trudeau at his word (more on them later). The truth is that it probably didn't matter to voters whose platform—the NDP or Liberals—was more progressive. In the end, this election was a referendum on the Harper regime, and voters turned out in the largest numbers since 1993 (68.5%) to soundly reject it, partly for Harper's lack of economic imagination, mostly for his government's downright meanness.

Let's look briefly at the record we can hopefully put behind us. After winning a majority in 2011, the Harper government waged an all-out war on civil society, parliamentary democracy, the environment, organized labour, First Nations, and anyone else that might pose an obstacle to its economic and social policy objectives. First among them was Harper's plan to reposition Canada as a pro-business, deregulated, low-wage "energy superpower," followed closely by the party's ideological commitment to small government and low taxes.

The Conservatives drained finances from public services and substantially downsized the public sector, while introducing labour legislation making it more difficult to certify (and easier to decertify) new unions. Services for veterans, and federal food and rail safety inspection suffered as jobs and funding were cut. The mythology of Canada as a peacekeeper was mutated by government propaganda into Canada the strong U.S. ally and warrior nation. Government scientists were muzzled, federal libraries closed, evidence ignored in policy-making (most infamously in the end of the mandatory long-form census), and government watchdogs fired.

The federal relationship with Canada's First Nations deteriorated to new lows despite a historic 2008 apology for the abuse suffered during Canada's long residential schools program. Indigenous frustration with the Harper government's intransigence on treaty rights, inadequate funding of First Nations infrastructure and social programs, and the outright dismantling of Canada's environmental assessment regime gave way to the Idle No More movement.

Electoral mobilizations followed. The national chief of the Assembly of First Nations, breaking a tradition of non-partisanship, said in September, "I will vote in this federal election in support of a government committed to closing the gap between First Nations people and Canadians. I continue to encourage all First Nations people to vote." Indigenous Rock The Vote campaigns across Canada mobilized young people in huge numbers. Turnout was so much higher than expected in some Northern communities that they ran out of ballots.

In a practice worthy of Nixon, the Harper government developed lists of "enemies" from civil society that were to be kept away from government decision-making, much of which took place at the very top in the Prime Minister's Office. In parliamentary committees, when civil society groups challenged certain pieces of legislation—for example, the merits and risks of a trade agreement, anti-terror law, or reforms to Canada's elections regime that risked disenfranchising tens of thousands of voters—their evidence was very frequently ignored. In some cases, Indigenous groups, environmental organizations and social activists who spoke out in the media were demonized by the government, threatened with defunding, and even likened to terrorists.

Following attacks against military targets in Ottawa and Quebec a year ago, the government introduced omnibus security legislation in January (C-51) that sanctioned potential civil liberties abuses by state security agencies if they could argue that doing so would make Canada safer. Worryingly, the law expanded the network of government agencies responsible for collecting information on Canadians whose activities could be alleged to threaten national security, including Canada's *economic* security. A consensus emerged among privacy experts, civil liberties advocates, and a list of former prime ministers and government officials that under these terms, nonviolent people asserting their right to contest major resource projects could find themselves on a terrorist watch list.

As a result, many Canadians felt targeted by Harper more than governed—especially Muslim Canadians. As the election drew close, the Conservatives ran a xenophobic campaign that disparaged Syrian refugees, fomented mistrust of Muslims, promoted contentious legislation that gives the government the right to strip Canadians found guilty of terrorism-related offences of their citizenship, and promised to forbid Muslim women from wearing the niqab during citizenship ceremonies or while performing public-sector work. The law and Charter rights be damned—Conservatives had an election to win.

That fear mongering was disturbingly successful, and though some of the negativity appeared to wear off, the NDP—the party that most overtly challenged the anti-niqab campaign, waged in particularly ugly ways by the Bloc and Conservatives in Quebec—was unable to capitalize. By then, Trudeau was running an attractive, optimistic campaign on a promise to change more than the government's policy direction, but the very way government interacts with the public. Strategic voting campaigns had limited if any real impact in the end. Trudeau appeared to be the least like Harper, and once his polling numbers reflected that, any chances the NDP had early on became dim hopes.

At first glance, the Liberal victory could be seen as a superficial win for progressives, though some insist it is an outright loss. On many of the most important issues to social justice activists, the Liberals are out of line. For example, though he promised to set binding carbon emissions reduction targets in November's climate talks in Paris, Trudeau has publicly supported the Keystone XL pipeline. His party endorses the yet-to-be-ratified Canada–EU Comprehensive Economic and Trade Agreement, and will almost certainly back the Trans-Pacific Partnership (TPP), even though it may compromise future Liberal stimulus measures. Instead of a national child care plan, as the NDP has been proposing for some time, the Liberals promised bigger (and undoubtedly important) monthly cheques to families with children from all income levels.

Meanwhile, the NDP is reduced to 44 seats in a Parliament where Conservatives now form the Opposition. With few exceptions, Canada's daily newspapers endorsed Stephen Harper for a fourth term on what they thought to be the strength of his economic policy. He was a jerk, but he was "our" (the One Per Cent's) jerk, they implied in editorials shrugging off the government's anti-democratic tendencies. All of this, and the Liberals' intimate connections to corporate Canada, will create significant rightward pressure on Trudeau, despite his having run on a progressive platform.

But in an important way, the worst is almost certainly behind us. The change in governance and mood was immediately apparent. Trudeau has promised some public scrutiny and debate of the TPP in Parliament after the text is released in November. He said his party has already started to negotiate with First Nations on an inquiry into missing and murdered Indigenous women. And he used his first conversation with U.S. President Barack Obama to announce that Canada would be pulling its CF-18s out of Syria and cancelling our participation in the F-35 fighter jet program, a costly priority of the U.S. military-industrial complex. The Liberals may also make Canada the first country in North America to legalize marijuana.

Canadians have not elected a reflexively progressive party, but we do now have a government committed to implementing a largely progressive platform that will improve many people's lives. We also have an opportunity, where none existed between May 2, 2011 and October 18, 2015, to revitalize our democracy—*if* enough leftward pressure can be mobilized outside of Parliament and the corporate media. The CCPA is not an advocacy group, but as Canada's foremost non-partisan progressive think-tank we are in much better position today than we have been for some time to influence economic, social and environmental policy in the short, medium and long terms. Onwards. M

Letters

Thanks for the escape

The *CCPA Monitor* did a great job of informing us of the plague of investor–state dispute settlement ("State Invaders," July-August 2015), but does little to indicate what citizens can do about this stupidity. Surely, withholding income tax is appropriate, or going further than simply exposing the individuals supporting this exploitation of the poor. We have known about the evils of investor–state disputes for a long time, yet the treaties continue to bloom today. Who should receive letters about this lack of morality?

I was glad to read the article in the same issue by Claude Vaillancourt, "Escaping Free Trade," with its suggestions for public referenda and more democracy directed toward the issues of human rights and environmental protection. It was helpful in answering my question about what is to be done. Surely the idea of balance in trade with any nation might be proposed as an alternative to "free" trade. Keep up the good work of enlightening readers, but please urge CCPA writers to add actions to their analyses of problems.

B. Hammond, Winnipeg, MB

Cut Khadr some slack

I totally agree with the letter in the last issue from M. Elliott ("Insulted by Khadr article," September-October 2015). I can fully understand his concern with Omar Khadr seeking leniency from his current sentence and the wording in the article concerning this person who was 15 at the time of the fighting in Afghanistan. The article should have taken care to mention that no country that sent military personnel to Afghanistan in 2001 had any reason or right to enter that country other than the desire of the United States to avenge the 2001 attacks on the World Trade Centre buildings. Afghanistan never attacked any of those countries and very likely wasn't providing safe haven to Osama Bin Laden. That being the case, M. Elliott and other Canadian soldiers were sent into harm's way by our government acting in a manner against international law pertaining to the conduct of wars.

D. Bridger, Loon Lake, SK

Both the invasions of Afghanistan and Iraq were war crimes. If a civilian visitor to Canada during the War of 1812 had killed an American invader they would have been considered a hero. The term *unlawful combatant* is one of those insidious newspeak phrases dreamt up by one of the Pentagon's Dr. Strangeloves, like *collateral damage* (i.e., murder of civilians) and *liberation* (i.e., slaughter). Every member of the resistance in Nazi-occupied Europe was an unlawful combatant. It is time to wake up to the fact that the military is no longer defending our country. It is being misused to support U.S. imperialism and is becoming the collective hitman for the corporate mafia.

B. Prestwich, Dundas, ON

Editor's note: On the *Monitor*

We're into our fourth issue of the *Monitor* in its new format, and have heard much positive and some negative feedback from readers about the layout. One of the more frequent comments in the second category is that some articles are difficult to read in the online version, specifically on tablets, and usually because some colours in the magazine are being incorrectly translated. We looked into the problem and hope we've addressed it, but please let us know if you're still experiencing this on your tablet or computer.

We received a few emails with questions about the cost of producing the *Monitor* in full colour, with suggestions we could get more bang for CCPA-supporter bucks if it was still in black and white. In fact, we are now spending less money than we were last year on printing and mailing. This is mostly because we have dropped from ten to six issues per year—an idea supported by a majority of readers—but it also reflects the lower costs today of magazine printing generally.

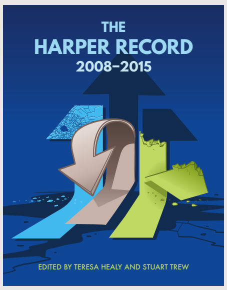
Some of the money we have saved in production has been put toward original feature articles, commentary and artwork. It's already having an impact. The July-August issue of the *Monitor* was downloaded more than 60,000 times! (Home delivery of the *Monitor* is, and will remain, a perk of supporting the CCPA.) For those who don't need the colour, there's always the option of printing the *Monitor* from PDF and switching to black and white (or greyscale) in your options menu.

We welcome your suggestions and ideas for how to make the *Monitor* better. Please send them, along with all other letters, to monitor@policyalternatives.ca.

Stuart Trew

Send us your feedback and thoughts: monitor@policyalternatives.ca

New from the CCPA



Damage report

The Harper Record 2008–2015, edited by **Teresa Healy** and **Stuart Trew**, picks up where the original *The Harper Record* (2008) left off while continuing a 25-year tradition at the CCPA of examining the policy legacies of Canadian federal governments during their tenure. From the economy to the environment, social programs to foreign policy, health care to tax cuts, the tar sands to free trade deals, the more than 30 co-authors of the book dig through the facts and key moments of the past two Parliaments, highlighting in particular the government's policy responses to the global financial crisis and Great Recession. *The Harper Record 2008–2015* is available for free download on the CCPA website.

A province, privatized

Despite the political recriminations and admonitions expended on the issue of privatization in Saskatchewan over the past ten years, the province has witnessed an acceleration of the privatization of public assets and services, according to the new **CCPA-SK** report ***The Wrong Track: A Decade of Privatization in Saskatchewan, 2004–2015***. Through a detailed chronological history, the report catalogues privatizations in all of their various forms, from the outright sale of Crown corporations to contracting-out and the growth of public-private partnerships (P3s). Overall, the CCPA-SK identifies more than 50 instances of privatization in the past decade, the vast majority initiated by the Saskatchewan Party government since its election in 2007.

Who's regulating workplaces?

A new study by **John Anderson**, ***Waiting to Happen*** (available in French and English), finds that federal underfunding and understaffing of safety inspectors is putting employees in federally regulated workplaces in harm's way. The study examines occupational health and safety developments between 2007 and 2012 in sectors under federal jurisdiction, including banking, communications, broadcasting, postal services, road, air, rail and water transport, as well as the federal government. "The overall situation is a recipe for potentially dangerous occupational health and safety issues and injuries," says Anderson. "Inspection is absent or so highly limited it cannot create the safe workplace environment that is surely everybody's goal and wish."

Ontario's minimum wage half-measure

October 1 marked the first year in which the Ontario government adjusted its provincial minimum wage to inflation, but the job is only half finished, says a study from the **CCPA-Ontario**. ***Raising the Bar: Revisiting the Benchmark Question for Ontario's Minimum Wage,*** published in partnership with the **Poverty and Employment Precarity in Southern Ontario (PEPSO)** project, assesses the consultation process and final report of the minimum wage advisory panel struck by the province in June 2013. It finds the panel's recommendations sidestepped a very important question: What is an appropriate benchmark for setting the minimum wage? "Seattle, Los Angeles, and San Francisco have all committed to increasing the minimum wage to $15 an hour, and New York State—the entire state—is considering the possibility," says report author Kaylie Tiessen, senior economist at the CCPA-ON. "There is still time for this Ontario government to revisit its own minimum wage and set it against a meaningful benchmark."

Public inquiry needed on Afghan detainees

A new report by the CCPA and the **Rideau Institute**, ***Torture of Afghan Detainees: Canada's Alleged Complicity and the Need for a Public Inquiry***, discusses shortcomings and violations of international law relating to Canada's transfer of hundreds of Afghan detainees to Afghan National Security Forces (ANSF), the National Directorate of Security (NDS) and Afghanistan's intelligence service between 2005 and 2007, despite substantial risks that these prisoners would be subjected to torture. "The government occasionally suspended transfers for various reasons, including disturbing allegations of abuse, but then resumed transfers on at least six occasions," says human rights researcher and advocate Omar Sabry, who authored the joint report. Sabry calls for an official commission of inquiry into the Afghan detainee transfers, and recommends Canada develop clear policies that would prevent future reliance on diplomatic assurances against torture, including in situations involving armed conflict and extradition.

For more reports, commentary and infographics from the CCPA's national and provincial offices, visit www.policyalternatives.ca

THE CANADIAN CENTRE FOR POLICY ALTERNATIVES

AN AGENDA FOR SOCIAL CHANGE 2016
CALENDAR

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This innovative resource is about more than keeping you organized – each month identifies and describes key dates in Canada's social justice history. Each day readers have an opportunity to explore how debates about equality, gender, environment, First Nations, labour, trade, and social programs shape our development and identity.

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The calendar – 48 pages packed with interesting historical facts and accessible story lines for each key date – will be available this fall for $25 (plus shipping and GST) from the CCPA. Pick up one for yourself and another for a friend: it's guaranteed to change the way you look at our history and the debates and decisions that continue to shape it.

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JORDAN BRENNAN

CANADA'S FAILED EXPERIMENT WITH CORPORATE INCOME TAX CUTS

According to many mainstream (neoclassical) economists, cutting corporate income tax (CIT) rates is wise public policy. By reducing the cost of capital, more of it will be supplied, and because investment is a key driver of growth, reducing CIT rates leaves firms with more after-tax income to plough into growth-expanding industrial projects. So, did the massive reduction in CIT rates in Canada beginning in the late-1980s spur higher levels of investment and more rapid growth?

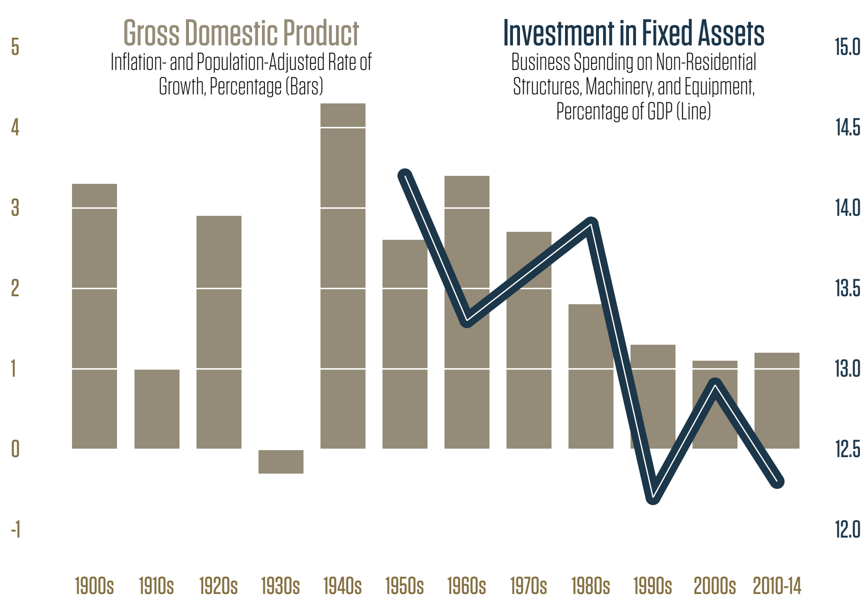
The short answer is no: far from improving economic outcomes, there is evidence to suggest that corporate income tax reductions depressed Canadian GDP growth. I present a detailed explanation of why that's the case in a forthcoming study to be published by the CCPA. Given the election debate around raising the CIT rate, I thought it worthwhile to summarize my findings.

In my study I contrast three Canadian corporate income tax rates—the effective federal CIT rate, the combined Canadian statutory CIT rate, and the weighted average effective rate on the top 60 Canadian-based firms—with five growth variables: investment in fixed assets, employment, GDP per capita, labour compensation, and productivity. Based on the findings, I conclude that there is no empirical or statistically significant relationship between the CIT regime and growth. Business investment is a key determinant of GDP growth, employment and labour compensation, but over the long term it is unresponsive to changes in the statutory or effective CIT rate.

The first round of significant corporate income tax reductions (from 36% to 28%) came in 1988, spearheaded by the Progressive Conservative government of Brian Mulroney. The second round was introduced in 2001 by the Liberal government of Jean Chrétien, which lowered the CIT rate to 22.1% by 2004 (where the rate already stood in the manufacturing and resource sectors). The most recent round of corporate income tax reform began in 2008 under the Conservative government of Stephen Harper. In a five-step reduction program, statutory federal CIT rates fell from 22.1% in 2007 to 15% by 2012. Over the past three decades, the provinces have also reduced rates—from an average of 14% in the late 1990s to 11% more recently.

Did these reforms spur higher levels of investment and more rapid GDP growth? The chart here plots the deep history (from 1900) of Canadian GDP growth and business investment in fixed assets. The decade average rate of GDP growth is adjusted for inflation and population and the decade average level of fixed asset investment is measured as a percentage of GDP. Even though CIT rates began to be reduced in the late 1980s, the 1990s and 2000s performed worse in terms of GDP growth.

The relative value of fixed asset investment sharply declined in 1929 and did not rebound in a significant way until the end of the Second World War. The first few decades of the postwar era experienced an upward trend in investment. Significantly (and ironically), not only has investment failed to increase in recent decades in tandem with CIT rate reductions, the pattern that investment takes mirrors the CIT rate. Far from the CIT regime and growth being strongly and inversely related, there appears to be a positive association between the two variables,



such that CIT rate reductions are historically associated with lower levels of investment.

Fixed asset investment averaged 13.5% of GDP in the postwar decades to 1988. But in the past three decades, while governments were obsessed with corporate tax cuts, business investment averaged just 12.6% of GDP. In sum, when we contrast the experience prior to the CIT rate reduction era (1945–1988) with the CIT rate reduction–obsessed era (1988–2012), we see a move from heightened industrial capacity expansion to capacity stagnation.

Canadian CIT rate reductions not only failed to lead to faster growth, there is evidence to suggest that CIT rate reductions contributed to slower growth. By reducing CIT rates, Canadian governments contributed to the increased income position of large firms. Instead of investing their enlarged earnings into growth-expanding industrial projects, Canada's corporate sector—especially its largest firms—have increasingly stockpiled cash on the balance sheet. This "dead money," as former Bank of Canada governor Mark Carney called it, is one ingredient in the heightened stagnation of recent times.

As the leading firms claim a larger share of national income through enhanced size and market power, their capacity to stockpile cash increases. By hoarding cash these firms stabilize dividend payments, thus reducing risk, and this leaves them with more liquidity for acquisition activities and to hedge against market downturn. One consequence of the stockpiling of cash, then, is that a smaller share of national income is deployed to expand employment and industrial capacity.

As the findings in my forthcoming CCPA paper suggest, corporate tax cuts will go down as one of the great Canadian public policy blunders of the past generation. Far from spawning higher levels of investment and growth, the government fixation with corporate tax cuts has depressed growth, with all the implications that has for jobs in Canada.

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SCOTT SINCLAIR

THE TPP AND THE COST OF DRUGS

On October 9, WikiLeaks posted the final text of the Trans-Pacific Partnership (TPP) intellectual property chapter, which the 12 negotiating countries, including Canada, had only just hammered out at a TPP ministerial meeting in Atlanta. While the chapter is not as bad as previous leaked drafts, and falls short of the most extreme demands from the brand-name drug industry and U.S. government, the concluded TPP is still a harmful agreement that will increase drug costs and reduce access to medicines, especially in developing countries. It also has worrying implications for Canada, binding our country to a regulatory regime that would lock in high drug costs.

Médecins Sans Frontières/Doctors Without Borders (MSF) and others have decried the potential impact of the TPP on drug costs and the availability of generic medicines in developing countries. The hardships that will be inflicted on the poor, the sick, and already strained public coffers in Vietnam and Malaysia are reason enough to oppose the TPP's "abusive" intellectual property (IP) provisions. But by establishing a new high-water mark for corporate-friendly IP protections the treaty sets a terrible precedent for future agreements. MSF concludes that, "although the text has improved over the initial demands, the TPP will still go down in history as the worst trade agreement for access to medicines in developing countries."

What about the potential impacts on regulations and drug costs here in Canada? The official line, according to the government's technical summary of the TPP, is that the rules of the agreement "reflect Canada's existing regime, system and laws" governing intellectual property protection for drugs. Even with the IP chapter in the public domain, it is difficult to verify these assurances until the full TPP text is released and examined by independent experts. It's also critical to understand that when the government refers to the TPP requiring no changes to Canada's "existing regime," it is already including future changes Canada must make to comply with the Canadian–European Union Comprehensive Economic and Trade Agreement (CETA), which has not yet been ratified, let alone implemented.

A quick analysis of the leaked text shows there are at least five good reasons to be concerned that the TPP's generous IP protections could still prove a minefield for efforts to control drug costs in Canada (where they are already the second highest per capita in the world after the U.S.).

1. Longer data protections for new drugs

Most media attention has focused on the length of data protection for biologics (large-molecule drugs). The U.S. had been pressing other TPP countries to adopt its standard of 12 years of data protection. Thankfully, the TPP fell short of this outrageous demand, establishing a complicated set of rules that provide from five to eight years of data protection. This is still the longest term of data protection ever enshrined by treaty, and will unquestionably hurt developing countries. Predictably, the insatiable Big Pharma lobby and its congressional supporters are unhappy.

Canada was cast as a bystander on this issue because eight years of data protection is in line with our current term of data protection for both chemical and biologic drugs (eight years, plus six months for clinical trials involving children). NAFTA requires only five years of protection for new chemical entities. The TPP, along with CETA, would bind Canada to a higher, more restrictive standard and lock in our costly, industry-friendly data protection rules forever.

2. A locked-in patent linkage system

The TPP is the first of Canada's international trade agreements to require "patent linkage." Under Canada's existing patent linkage system, before Health Canada can grant marketing approval to a generic version of a brand-name drug, the generic company must demonstrate that all relevant patents on the brand-name product have expired. This provides a ready-made pretext for litigation even on spurious grounds, delaying cheaper generic drugs from reaching the market.

The TPP's IP chapter does not appear to require any changes to Canada's current patent linkage system. But none of Canada's other trade treaties, including the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and NAFTA, require patent linkage at all, leaving future governments completely free to reform or even eliminate it. Nor would CETA require patent linkage. In fact, patent linkage is not permitted in the EU, where its negative impact on drug costs is well understood. By contrast, the TPP, alone of all free trade agreements, will bind Canada's costly patent linkage system, making future cost-saving reforms far more difficult.

3. More generous patent term extensions

The TPP also includes obligations for patent term "adjustments" (i.e., patent term extensions), supposedly to compensate patent holders for delays in getting regulatory approval. Experts analyzing similar provisions in CETA conservatively estimate the increased drug costs to Canadians at $850 million annually, which is almost double the savings from removing tariffs on all European goods entering Canada. The TPP and CETA will add up to two additional years of monopoly patent protection on top of Canada's existing term of 20 years. By entrenching patent term extensions in two major international treaties, the brand-name industry has won added insurance that these extremely costly concessions can't be undone by future Canadian governments.

While not as bad as feared, the TPP IP chapter is still very bad.

4. New investor rights for foreign drug companies

Another controversial aspect of the TPP is its investor–state dispute settlement (ISDS) mechanism, which empowers foreign investors to bypass domestic courts and seek compensation before private tribunals when government measures taken to protect the public interfere with their investments. ISDS supplies yet another powerful tool for brand-name pharmaceutical companies to protect their monopoly profits (in total violation of the espoused principles of free trade, we should add).

Under NAFTA's ISDS mechanism, Canada is currently being sued for US$500 million ($651 million) by the giant U.S. drug company Eli Lilly because Canadian courts invalidated extended patents on two of the company's drugs. The courts ruled that the patent extensions were not justified because Eli Lilly had failed to provide evidence of new therapeutic benefits. This opened the drugs to generic competition, reducing costs to Canadian consumers and the public health care system. By expanding new investor–state dispute settlement rights to drug companies from Japan and elsewhere, we can expect the TPP to multiply these types of aggressive corporate challenges against Canada and other countries.

5. Transparency annex is still secret

A final aspect of the TPP that could be cause for concern is its "transparency annex" on health care, which is still secret. Throughout the TPP talks, the U.S. and Big Pharma targeted New Zealand's government agency Pharmac, which does an exemplary job of controlling drug costs by negotiating with both brand-name and generic companies over the costs of drugs that it approves for use in the country's health care system. New Zealand's per capita drug costs are among the lowest of OECD countries. In the TPP's "transparency annex" the U.S. pursued new rights for brand-name companies to contest the decisions of public drug agencies and tilt the playing field toward "market-based" pricing, increasing costs to governments and the health care system.

New Zealand strongly resisted this push, with little help from Canada. It's unclear what the final TPP text says, but there are concerns that Canada bowed to U.S. pressure to cover federal drug purchasers under the annex. While most drugs in the Canadian public health care system are purchased by provincial governments (which will not be covered), the federal government buys for Aboriginal peoples, the military and others. The TPP sets a terrible precedent to encumber the federal government in its ability to get the best therapeutic value for taxpayer's money when it purchases medicines. It could also interfere with Ottawa's ability to co-operate with provincial governments in lowering costs and impede the future creation of a cost-effective national pharmacare program.

The leaked TPP intellectual property chapter reveals that resistance from other TPP governments, pressure from the generic industry, and protest by outside public interest groups successfully watered down the most extreme demands of the U.S. and Big Pharma. While not as bad as feared, this chapter is still very bad; it is a big setback for efforts to ensure affordable access to medicines in the Asia Pacific region and beyond. Its worst impacts will be felt by the poorest and most vulnerable in developing countries, but it also has worrying implications for Canada, locking our country into an industry-friendly regulatory regime that virtually ensures higher drug costs for the foreseeable future.

SCOTT SINCLAIR IS THE DIRECTOR OF THE CCPA'S TRADE AND INVESTMENT RESEARCH PROJECT. FOR MORE CCPA ANALYSIS ON THE RECENTLY CONCLUDED TPP, VISIT WWW.POLICYALTERNATIVES.CA.

MARY CORNISH

GENDER PAY GAP CONSULTATIONS WELCOME

In September 2014, Premier Kathleen Wynne issued a mandate to Minister of Labour Kevin Flynn to work with the minister responsible for women's issues to "develop a wage strategy to close the gap between men and women in the context of the 21st century economy." On April 20, 2015—Ontario's Equal Pay Day—the Ministry of Labour set up a gender wage gap steering committee to consult and develop recommendations for the minister.

While the Equal Pay Coalition had asked for an independent consultation process, the labour ministry insisted on having government officials in the lead. Linda Davis, an Equal Pay Coalition member, and Prof. Parbudyal Singh are advisory members to the committee, which was originally tasked with developing an action plan by the time of Ontario's next Equal Pay Day in April 2016. However, the process stalled and the consultation documents and arrangements were not revealed until October.

The consultation process kicked off with three documents, including *Closing the Gender Pay Gap: A Consultation Paper for Businesses and Organizations*, available on the Ministry of Labour's website. Between now and February 16, consultations will take place through in-person meetings, online submissions and town hall meetings in 12 locations (yet to be announced when the *Monitor* went to print).

The consultation paper makes no bones about the gender inequities facing women in Ontario:

> Nearly half Ontario's workforce is women, yet women earn less than men throughout their working lives. Despite increased participation in the workforce and higher levels of education and increased skills, women still face significant barriers and disadvantages compared to men. More women than men are in low paying jobs, are disproportionately in minimum wage and part time work and are under-represented in occupations that have higher paying wages. This negatively affects women, their families and Ontario's economy. In many of today's families, both parents work and try to balance work and family responsibilities. Workplaces have been slow to adjust to this workplace trend.

Importantly, the consultation paper recognizes that women who suffer many disadvantages, such as Aboriginal women, women with disabilities or immigrant women, face higher pay gaps. The consultation documents also draw the connection between the gender pay gap and women's unequal reproductive and care responsibilities. A focus on the "working life cycle" highlights that the gender pay gap "becomes wider over a woman's working life in almost all industries and sectors.

"Regardless of how it is measured, the gender wage gap signals a greater, underlying problem of labour market and workforce inequality," says the government document. An appendix provides a good primer on women's and men's work and pay in Ontario, pointing out, for example, that gender segregation in occupations and industries has not changed substantially since 1987, and that the gender pay gap, based on annual average earnings, only narrowed by 11.3 points in a 24-year period (it was 44.1% in 1986 and decreased to 31.5% by 2011).

While the Ontario government had been in the lead on pay equity issues since the *Pay Equity Act* came into effect in 1988, officials were slow to recognize that the law, on its own, was not going to close the gender pay gap. The European Union and its member countries have been more actively working to close the gender pay gap as a key part of a country or region's strategic planning. Similarly, the current Ontario government recognizes that actions by government and business to close the gender pay gap must be embedded in the province's "Building Ontario Up" economic planning.

Following the lead of the Equal Pay Coalition, the government consultation process will take a broad approach to the gender pay gap to see how it affects women at work, in their family and in their community. By examining how the gender pay gap affects women across the economic spectrum, the committee will examine how government, business, labour and individuals can together work to address the conditions and systemic barriers that contribute to the pay gap. Importantly, the consultation process will consider how issues such as race and disability operate to produce even greater pay gaps.

It is still not clear how the government intends to carry out the premier's mandate to the minister responsible for women's issues to work with other ministers to "ensure that a gender lens is brought to government strategies, policies and programs." No action has been taken on this front to embed a "gender lens" in government decision-making, including the 2015 Ontario budget.

The Equal Pay Coalition conducted a training session on March 27, 2015 for more than 80 Ontario government staff on how to conduct gender-based public policy-making. But the coalition is not aware of any efforts within Ontario ministries to prepare for the next budget planning process. Steps need to be taken now to include a gender analysis in ministry policy-making and budget preparations.

All of this has been a long time coming. The background paper for Ontario's new government consultations on the gender pay gap notes that Canada committed in the 1995 Beijing Declaration and Platform for Action to conduct gender-based analysis on all future legislation, policies and programs.

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ERIKA SHAKER

A FEDERAL ROLE IN POST-SECONDARY EDUCATION

In our report, *What's the Difference? Taking Stock of Provincial Tuition Fee Policies*, David Macdonald and I examine how the shift away from public funding to tuition fees plays out across the country and reveal how the trend has accelerated since 1993–94.

Provincial governments are responding to growing public concern about the rising costs of university education. Half have implemented de facto two-tiered tuition fees, reducing costs for in-province students. All but two provinces have capped the amount by which tuition fees can continue to increase annually, replacing accessibility with predictability. Only two provinces (New Brunswick and Alberta) have implemented temporary freezes of one and two years respectively, with Alberta explicitly increasing funding for universities to enable this policy change. There is a range of provincial programs that provide some financial aid, from debt-reduction to targeted bursaries to various "incentive"-based initiatives. This has made for a highly complex, opaque system of assistance.

But are the intents of these programs to ensure universal accessibility or to manage public opinion? The implementation of two-tiered systems has complicated comparisons. The cost of an education depends on provincial policy, the student's province of residence, and the location of the university.

Targeted federal funding

Cuts to transfer payments from the federal government to the provinces in the mid-1990s, combined with a removal of restrictions on how that money could be spent, precipitated the significant decline of the share of provincial public investment going toward university operating revenue—and the dramatic increase in tuition fees. In 1992, the average level of public investment was 77%—this declined to 55% in 2012. Over the same period, tuition fees as a share of university operating revenues increased from 20% to 37%. Currently, the federal transfer for post-secondary education is 0.2% of GDP.

Solution: (Targeted) money talks. An enhanced, dedicated post-secondary education transfer to the provinces would ensure that federal funding is used specifically to reduce tuition fees at the source, rather than allowing provinces to reduce their level of support.

Grants vs. loans vs. private saving schemes vs. tax credits

While tax credits for education and other private savings mechanisms have been highlighted as evidence of assistance for students, tax credits disproportionately benefit wealthier families. Registered Education Savings Plans (RESPs) are of greatest benefit to families who have the disposable income to save in the first place. Enhancements to the Canadian Education Savings Grant (CESG), targeted to low-income Canadians, rest on the faulty assumption that what people living in poverty lack is the incentive to save for their kids' education, rather than the disposable income to do so.

Collectively, the amount of student debt is growing: once it became clear the previous $19 billion limit would be reached by January 2016 (well before the estimated date of 2020), the government increased it to $24 billion. It also announced it would be cracking down on students having difficulty making repayments.

Solution: Overhaul the current federal loans-to-grants ratio (currently nearly 4:1) and implement a more robust system of needs-based grants. This will reduce the financial burden on students, prioritizing those who are most vulnerable.

Economic and social consequences of an indebted generation

The effects of student debt are significant and long lasting. It makes little social or economic sense to graduate an indebted generation into a precarious job market and insecure economy where youth unemployment rates are about 13%. Debt delays the degree to which—and when—young people can fully participate in their communities, society and the economy. Student debt represents and contributes to a tremendous loss of potential that affects us all.

Solution: The federal government, in consultation with the provinces, must develop a comprehensive plan to address the socioeconomic burden of student debt, to address the issue of unpaid internships that take advantage of desperate and often indebted graduates, to re-examine the minimum wage, and to implement a youth jobs strategy.

The unravelling of a national commitment to post-secondary education based on principles of universality, accessibility, affordability, equity and accountability is directly linked to the withdrawal of the federal government's role in the 1990s. The range of provincial responses to this policy decision has led to a scattershot approach to university finance. This resulted in vastly different degrees of downloading onto students and their families as they pursue higher education.

It is time for a federal approach that restores adequate funding, recognizes the importance of needs-based grants over loans and private savings mechanisms, and implements a youth employment strategy that meets the social and economic needs of graduates and Canadian society.

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Asad Ismi

Syriza holds on, but the left is weakened in Greece

THE GREEK TRAGEDY of national economic collapse appeared to be turning into farce with the re-election of Syriza at the end of September. The leftist party had been first elected only seven months earlier on the promise to end the austerity measures forced on Greece by the troika of the European Union (EU), International Monetary Fund (IMF) and the European Central Bank (ECB) in exchange for $339 billion in bailout loans (see March *Monitor*). Reforms to that point had devastated the Greek economy causing it to shrink by 25% and increasing overall unemployment by the same amount, and pushing youth unemployment to 48%.

Syriza has now been returned to power after pledging to enact arguably more severe austerity measures than the ones it had first been elected to oppose. A month after the July 5 referendum, in which Greeks overwhelmingly (61.31%) rejected the troika's bailout plans, Alexis Tsipras, Syriza's leader, signed a third memorandum of understanding with Europe, in which his government agreed to significant tax hikes, drastic pension cuts and wide-ranging privatizations that exceed many of the structural reforms undertaken over the previous five years. When some of his own party members rebelled against this clear betrayal, ending Syriza's coalition majority in parliament, Tsipras called an election.

The party took 35.5% of the vote in September, winning 145 seats in the 300-seat Greek parliament—only slightly lower than its January performance—allowing Syriza to again govern in coalition with the right-wing Independent Greeks party, which won 10 seats. Syriza's closest rival, the right-wing New Democracy party, got 28% of the vote, but the more important voice came from the many people who did not vote. This election saw the highest abstention rate in Greek history (45%), signifying widespread dissatisfaction with Syriza and the Greek political system in general. This is particularly remarkable in a country where voting is compulsory.

Cyprus-based author and news commentator Andreas C. Chrysafis, who supported Syriza in January, told me "the Greeks can take no more austerity—they have reached rock bottom and that is why they did not vote: they no longer trust the system.

"The Greek debt is not sustainable and only a madman would believe that it is. It was a bad mistake by Tsipras to betray the trust of the people, which is unforgivable. I do not support Syriza any more nor do I support the current political mentality of the Greeks."

> Greece must "implement a fiscal consolidation and reform programme that was designed to fail."

The central contradiction brought out by both of this year's Greek elections has been the electorate's desire to end the EU's austerity measures, but to also stay in the EU. Syriza reflects the pro-EU stance of most Greek voters, which hobbles its attempts to negotiate a better deal, with fewer neoliberal concessions, in return for badly needed loans.

According to former Syriza finance minister, Yanis Varoufakis, who was removed by Tsipras as Greece's chief negotiator with the troika in April, the government must now "implement a fiscal consolidation and reform programme that was designed to fail."

In a *Guardian UK* commentary on the September election, Varoufakis explained: "Illiquid small businesses, with no access to capital markets, have to now pre-pay next year's tax on their projected 2016 profits. Households will need to fork out outrageous property taxes on non-performing apartments and shops, which they cannot even sell. Substantial [value-added tax] rate hikes will boost VAT evasion. Week in week out, the troika will be demanding more recessionary, anti-social policies: pension cuts, lower child benefits, more foreclosures."

Chrysafis warned, "If the Greek government and the political elite insist on introducing all of the troika's [bailout] conditions, the Greek people will rise up and possibly topple the government for a new start. They did that before with the Greek junta [the military dictatorship which ruled from 1967 to 1974] and would not hesitate to do it again." The author says a similar wave of antipathy is affecting politics in other parts of Europe.

The Communist Party of Greece (KKE), which has long warned that Syriza was no different from the other pro-austerity mainstream parties (New Democracy and the social democratic PASOK) that have perpetuated Greece's economic crisis, won 15 seats in the Greek parliament in September. Plato Routis, the party's representative in Toronto, told me the Communists are "the only party in the Greek parliament that opposes austerity and Greece's membership in the EU and in NATO.

"But we go further because the main issue is about who controls the economy and the means of production. We want to nationalize the big banks, major corporations including shipyards, and the natural resources of Greece. We will strongly oppose all austerity measures that Syriza will try to impose and do this inside and outside parliament by mobilizing the people against them. We have close relations with the All-Workers Militant Front (PAME), the most militant trade union confederation, which will be supporting our efforts."

Routis said he considers the EU a trap that has robbed Greece of its political and economic independence and demolished the country's industry. He thinks that this independence must be regained if Greece is to recover economically.

"Greece is a rich country, contrary to popular belief. We grow wheat, vegetables, sugar, cotton and we have oil, bauxite and chromium. Some years ago we were not only self-sufficient in food production but were exporting food, so Greece has the resources to sustain its population."

In fact, the Communists are not as alone in some of these plans as Routis suggests. The new Popular Unity party, a splinter group of former Syriza radicals that did not win any seats in the September election, also plans to steadfastly resist new austerity measures outside of parliament, but will support the party when it introduces social measures such as legalizing gay marriage or implementing more welcoming immigration rules.

In an interview with *Jacobin Magazine*, Popular Unity member Stathis Kouvelakis claimed the one benefit of Syriza's catastrophic first seven months in power was that "political illusions have now dissipated," in that it convinced the Greek and EU people "of the brutally undemocratic and pernicious character of the European Union. It provides a peerless practical demonstration of this."

Like Routis, he believes Tsipras was afflicted with a "Europeanist blindness.... He had not understood that the interests of the EU leaders could be contradictory and antagonistic. For me he proved his genuine blindness—he was truly naïve."

Varoufakis gives the situation a slightly different spin.

"During the first six months of 2015, when we were challenging the troika's monopoly over policy-making powers in Greece, its greatest domestic supporters were the oligarch-owned media and their political agents. The same people and interests who have now embraced Tsipras!" he wrote in his post-election column. "Can he turn against them? I think he wants to but the troika has already ensured that his main weapons have been disabled (with, for example, the disbandment of the economic crime fighting unit, SDOE)."

Routis told me more could be done for the Greek economy outside the EU, notably because this would give much financial authority back to the government. "For instance, tourism is a big industry in Greece and we could get a lot more tourists if we were able to devalue our currency," he said. "Our biggest industry, which is shipbuilding, has been destroyed and so has sugar and garment production. With control of our economy, we would be able to start the process of reviving these and other industries to create employment and generate income."

Corruption and military spending are also significant drains. Routis pointed out that Greece would save billions by leaving NATO, where a lot of Greek wealth is being spent. In addition, he emphasized that the Greek oligarchy "has been draining billions of Euros out of the country for the last 20 years," storing it in offshore tax havens. "Syriza promised to destroy this oligarchy, but did nothing about it. Through nationalization we will extinguish the power of this elite."

In spite of its anti-austerity position, which most Greeks share, and its commitment to rebuilding the Greek economy to benefit the majority, the KKE remains stuck at 15 seats in parliament, which is the same number it had before the election, placing it fifth among parties. Alarmingly, Golden Dawn, a neo-Nazi party with criminal connections (and several leaders in jail on murder charges), won an extra seat in September's elections, placing it third among parties with 18 seats.

Routis explained that the KKE's limited voter base stems partly from the fact that despite five years of brutal austerity, Greeks are not yet ready to leave the EU, so they vote for the lesser evil, Syriza, as opposed to the mainstream New Democracy and PASOK, which are largely blamed for the economic mess. "People would like to give Syriza another chance because it has only been in power for seven months", he said.

Varoufakis suggested Europe's refugee crisis might have played a role as well. "A comparison [by the conservative opposition] between the welcome afforded to the thousands of shipwrecked people in recent weeks with the concentration camps built by the Samaras government explains why disappointed progressives swung back to SYRIZA in the polling stations," he wrote.

The pro-austerity, pro-EU parties were not above fear mongering, says Routis. Their line of argument suggested that "without the EU the Greeks would lose whatever little money, jobs or property they have left at present and become isolated internationally.

"There is also the fact that the Greek people have not felt the full pain of EU-enforced austerity yet, which will come with the implementation of the third memorandum during the coming months. It is true that Greeks have suffered a lot during the last five years of austerity, but there is even greater suffering to come." M

Tyler Levitan

Labelling Israeli settlement products the least we can do

ON JULY 21, the Conservative government announced an "expansion" and "modernization" of Canada's free trade agreement with Israel. It made few headlines, and eluded the attention of the official Opposition. But if Canada hopes to play a positive role in the international community this development cannot be overlooked.

It has become common knowledge that since 1967, Israel has maintained a military occupation over lands it captured in a war with its Arab neighbours. We are all familiar, too, with the fact that Israel has been establishing Jewish-only settlements on prime real estate within these occupied territories in violation of the Fourth Geneva Convention. For nearly 50 years, Israel has openly flouted international law as it continues to build new settlements and expand existing ones, displacing more Palestinians and appropriating more lands and resources in the process.

Canada's official policy on the Israeli–Palestinian conflict recognizes the application of the Fourth Geneva Convention to the lands Israel has occupied since 1967, and states, "The settlements also constitute a serious obstacle to achieving a comprehensive, just and lasting peace." So these settlements, according to Canada, are not only war crimes, but are a "serious obstacle" to ending one of the longest-running conflicts in the world.

Over nearly 50 years of this illegal behaviour—and in violation of our official policy—Canada has never levelled sanctions against Israel. In fact, as Israel has continued to gobble up Palestinian land and resources, we've been rewarding Israel, rather than reprimanding its government. In 1997, while Israel was violating its obligations under the Oslo Accords by exponentially expanding illegal settlements, Canada established its first-ever bilateral trade agreement outside of North America: the Canada–Israel Free Trade Agreement (CIFTA).

> Israel is to blame for its illegal settlements, and cannot be disconnected from them.

Under CIFTA, Canada has been importing goods produced and manufactured in Israel's illegal settlements, free of tariffs. Nearly 20 years after CIFTA's signing, you would think this practice would be reversed, since Israel's current prime minister has made it clear he refuses to establish a Palestinian state and will never relinquish land Israel has settled illegally within occupied Palestinian territory.

Not only has this practice continued without hindrance, it has not even been discussed in the Canadian political arena. The European Union, meanwhile, has had measures in place for well over a decade to ensure that illegal settlement products do not enjoy tariff-free status under its free trade agreement with Israel. (The EU recognizes the settlements as being illegal under international law.)

It gets worse. Canadian consumers are not given the real freedom of choosing to avoid products from Israel's illegal settlements, since they are mislabelled as being "Made in Israel." This violates Section 7(c) of the Consumer Packaging and Labelling Act, which prohibits false and misleading representations on pre-packaged products, including the product's origin.

The U.K., Belgium and Denmark each have national guidelines on labelling goods from Israel's illegal settlements, and the EU committed to establishing these guidelines years ago. After being pressured by John Kerry to delay implementing them until after the most recent "peace talks" (which of course failed in the face of Israel's refusal to freeze expansion of illegal settlements during the talks), the EU has committed to finalizing its policy of labelling settlement products by the end of 2015.

The complete lack of discussion on this issue in Canada is not because those segments of Canadian civil society that support Palestinian human rights have not tried to initiate dialogue. The United Church of Canada sent a letter to former foreign affairs minister John Baird on February 28, 2013, urging the Canadian government to "introduce guidelines for retailers that would encourage them to label goods from the settlements differently from products made in Israel."

Of course, Israel is to blame for its illegal settlements, and cannot be disconnected from them, since successive Israeli governments are fully responsible for establishing them and creating the conditions for their expansion. Logically, sanctioning Israel would be the appropriate measure to take.

While many supporters of Palestinian human rights acknowledge that labelling goods from illegal settlements will not be enough, as the United Church has indicated it is probably the very least we would expect Canada to do. M

Marc Lee

Why 2015 matters for the climate

We are at a crucial moment in human history.

ILLUSTRATION GUILLERMO TREJMO

THE GLOBE IS warming, with 2014 the hottest year in known history, and 2015 on pace to top it. We can see the symptoms of Earth's rising fever in shrinking Arctic sea ice, retreating glaciers, rising sea levels, and the growing number of extreme weather events worldwide. Everyone is affected by the changing climate, although some are more vulnerable than others.

Through 2015, governments have been working toward a new international agreement to constrain carbon emissions. Last year's historic accord between the United States and China to reduce emissions is a positive sign. They have joined the European Union in pledging potentially game-changing commitments ahead of meetings in Paris at the end of November. As these three nations represent more than half of global emissions, their promises have infused hope into climate negotiations for the first time in many years.

Grassroots pressure on nations is also building. A year ago, 400,000 people marched through New York City to demand climate action. It was the largest gathering of its kind in history, with satellite marches taking place around the world. Resistance to new pipelines and coal ports is making life difficult for fossil fuel corporations. Divestment campaigns are turning fossil fuels into the new tobacco, affecting financial markets in the process and questioning the legitimacy of a business model that is inconsistent with a habitable planet.

There is also hope in the rising support for, and falling cost of, renewable energy, the shift away from private car ownership among young people, and a generalized awareness that addressing climate change is not a technical problem, but a political one.

These global dynamics are playing out in Canada. Proposals to move Alberta bitumen through new pipelines heading south, west and east are fiercely opposed by impacted communities and their allies. The same is true of proposals to expand ports to handle greater loads of coal exports. On the West Coast, the B.C. government is obsessed with developing a Liquefied Natural Gas (LNG) export industry that would double or triple fracking operations.

Pressures for Canada to become an even bigger fossil fuel export platform have eased for the moment due to reduced demand in Asia and excess supply in world commodity markets. This is a window of opportunity to reflect on our collective future.

The reality of climate change means we must stop relying on what's easy (digging up ever-more fossil fuel resources for export) and start rethinking what shared prosperity looks like. Ontario, Quebec and British Columbia have already taken important first steps on climate action. There is considerable room for federal engagement, until now virtually absent.

In this special issue of the *Monitor*, we look at the state of play of climate and energy policy in Canada and its global context. Our climate justice approach is about finding win-win outcomes that improve health and well-being, create good jobs and vibrant communities, and ensure the sustainability of our energy networks and economy generally. In other words, we're concerned with "the good life," not technical fixes that leave social and economic wealth inequality in place. A just and sustainable 21st century economy is possible, but we are going to have to work for it, together. M

Demonstrators at the 400,000-strong climate change march in New York City in September 2014.

AP Photo by Mel Evans

Danny Chivers and Jess Worth

What's on the table at Paris?

World leaders and country negotiators will gather from November 30 to December 11 for COP21 (the 21^{st} Conference of the Parties to the UN climate convention). Their stated aim is a binding international treaty to keep global temperature rise below two degrees Celsius above pre-industrial levels, to come into effect in 2020. Everyone in the climate world is talking about Paris. Governments have already been discussing the details for several years. Here is how the draft deal is shaping up.

1. Cutting the carbon

What's on the table?

The world's governments have set themselves a goal: to stop the planet from warming more than two degrees Celsius above pre-industrial temperatures. However, they have never agreed to sufficient cuts in greenhouse gas (GHG) emissions to achieve this. And, in any case, two degrees is now widely understood to be a dangerous level of warming. Many Southern movements and small island states are calling for a 1.5-degree target instead.

To avoid the really scary climate outcomes, the Paris talks should be discussing how to leave at least 80% of fossil fuels in the ground. Sadly, no such subject is on the table; instead, the negotiations are relying on "intended nationally determined contributions" (INDCs). These are voluntary, non-binding promises of emissions cuts that governments say they will make from 2020 onward.

By mid-September, 62 countries had submitted INDCs, including China, the United States, Australia, Russia and a joint submission from members of the European Union. The inadequate cuts proposed by these big polluters will make it practically impossible to produce a set of global pledges that add up to a safer climate.

This process also ignores the crucial concept of historical responsibility. It's only fair that the countries that have grown rich by pumping fossil-fuel pollution into the atmosphere should make the fastest, deepest cuts. Instead, the INDC process simply invites governments to make pledges based on what they "think they can achieve," rather than what would be equitable or effective.

There is also no mechanism requiring rich countries to reduce any emissions before 2020. The only significant global carbon targets anywhere in the documents refer to reaching zero emissions by either 2050 or 2100, with no plan for getting there.

What would be a good outcome?
Of all the countries that have submitted INDCs, only Morocco and Ethiopia have so far pledged cuts that would actually meet a two-degree target. As a result, senior EU negotiators are already admitting that the Paris talks will not result in a deal to keep to a temperature rise below three degrees, let alone two or 1.5. This is why some governments are now calling for a mechanism to "ratchet up" the various countries' targets at future summits. This feeble deferment of responsibility seems to be the best we can hope for.

2. Show us the money!

What's on the table?
In order to shift away from fossil fuels, many Majority World nations need financial support and access to clean energy technology. Equally important—and often sidelined or bundled together—are the issues of adaptation, and loss and damage. A certain amount of climate change is inevitable (and underway), and poorer nations urgently need funds to build up their defences and pay for the damage. This money should come from the richer countries that are overwhelmingly responsible for causing the problem.

So far, richer nations have agreed to "mobilize" $100 billion of "climate finance" per year by 2020. Unfortunately, this is an arbitrary figure not based on any assessment of what is actually needed, and Northern countries have barely managed to drum up 10% of this already insufficient goal. To make matters worse, the definition of "mobilize" is purposefully broad—to include loans, private finance, grants with strings attached, and the reallocation of aid budgets.

What would be a good outcome?
A good outcome would involve larger financial pledges and tougher language that would lead to wealthy nations handing over no-strings, non-refundable cash. It would also include a commitment to a "just transition," where governments spend money to support and re-train workers from the dirty energy industries, and help them to find decent employment elsewhere.

3. Carbon trading

This is the idea of issuing tradable permits for GHG emissions, so instead of reducing its own emissions a country or business can purchase reductions or "offsets" from elsewhere. This concept was pushed into the UN climate negotiations by the U.S. and others in the 1990s, and since then has taken up a huge amount of money, time and effort, with little effect on emissions.

The world's flagship carbon market is the EU Emissions Trading Scheme (EU-ETS). Designed by financiers and shaped by fossil fuel lobbyists, the scheme is riddled with loopholes. Since its launch in 2005, it has led to no meaningful drop in emissions, but has produced large cash windfalls for polluters, and diverted political time and attention away from more effective solutions. Creating a market for carbon reductions also provides an income stream for all kinds of dubious and dangerous schemes, from failed tree plantations to "efficient" coal power stations to geoengineering.

What would be a good outcome?
The smallest possible role for carbon markets, to allow space for emissions reduction initiatives to be developed. A number of Southern countries are lining up against carbon trading, and could be successful in stalling its expansion with enough external support.

4. Forest protection

Since 2005, the concept of "Reduced Emissions from Deforestation and Forest Degradation" (REDD) has been part of the talks. In 2010, REDD was expanded to include better conservation, management and reforestation practices, and acquired the nickname "REDD+".

This all sounds worthwhile, but there are monsters hiding in this particular forest. Because the focus is on reducing emissions from deforestation rather than preventing it, replacing a rainforest with a larger monoculture plantation could theoretically count as a successful REDD+ project. There is huge debate over whether REDD should be linked to carbon trading, which would allow polluters to keep pumping out greenhouse gas, but "offset" their climate damage by giving money to forestry projects.

Many critics, particularly Indigenous groups, fear that REDD+ will lead to investors and speculators buying up forest land to earn carbon credits, threatening the homes and livelihoods of the people who live there.

What would be a good outcome?
Some governments will be pushing to include forestry in more of the world's carbon markets, and it is vital that they do not succeed. It is a painful irony that the (currently very small) role of carbon trading in REDD+ is taking up all the space for debate on this issue, leaving little time to discuss more effective solutions, such as respecting the land rights of the people who live in forests—particularly Indigenous peoples.

5. Whose responsibility?

Here's a phrase that's a bit of a mouthful, but plays a vital role in the climate talks: "Common But Differentiated Responsibility & Respective Capabilities" (CBDR & RC). It's the idea that the countries with the greatest responsibility for historic climate change, and which have the most resources available, should take the first and biggest steps toward tackling the problem, and should offer support to the countries with less responsibility and fewer resources. This important principle was won by Southern negotiators in earlier climate meetings, and is now under attack, with some Northern countries pushing for more of the burden of emission cuts and costs to fall on the developing world.

What would be a good outcome?
Hopefully, Southern negotiators will get the support they need from both inside and outside the talks to defend this important principle. M

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Gail Davidson and Rohan Shah

Canada's failure to reduce emissions

Unlawful or above the law?

NO MATTER HOW you look at it, Canada is a climate change laggard. Carbon dioxide emissions—the largest contributor to global warming—are now 18% greater than they were in 1990. The pledge Canada made following the international meeting of nations in Copenhagen in 2009—a 17% reduction in greenhouse gas (GHG) emissions from 2005 levels by 2020—was not only weak, but is not being met.

As if this wasn't enough, Canada in 2012 became the only one of 195 countries to withdraw from the Kyoto Protocol, the emissions agreement made under the United Nations Framework Convention on Climate Change (UNFCCC), to which Canada remains a party. In fact, by 2013, Canada's carbon emissions were only 3% lower than they were in 2005. This translates into an average yearly reduction rate of 0.38%, far below the average rate of 0.88% required to meet our Copenhagen target.

The Canadian government's stance ahead of the upcoming Paris Conference of the Parties (where the international community will create a successor to the Kyoto Protocol) is predictably disappointing. On May 15, then environment minister Leona Aglukkaq announced that Canada would commit to a reduction in GHG emissions of 30% below 2005 levels by 2030. This equates to around a 14% reduction compared with 1990 levels—the weakest pledge among G7 countries, and less than what is deemed necessary by the Intergovernmental Panel on Climate Change (IPCC) to avoid the catastrophic consequences of global warming, namely a reduction of 25–40% below 1990 levels by 2020.

The IPCC, a UN scientific body tasked with supporting the UNFCCC by reviewing and assessing climate change data, has concluded that a temperature increase of more than 2°C over pre-industrial (1850) levels will cause "severe, pervasive and irreversible impacts on all the world's people and ecosystems." The IPCC predicts that if extensive reduction measures are not taken now, meeting the 2°C target will have become impossible by 2030. That a 25–40% reduction by 2020 will create only a 50% chance of avoiding catastrophic global warming makes Canada's weak pledge even more damning. And our Copenhagen target, which is not being met, would only have reduced our GHG emissions by a paltry 2.5% during this same period.

Canada's failure to meet targets considered necessary to avoid global disaster is extremely discouraging, but could it also be against the law? A recent international victory for climate litigation raises this interesting possibility.

The *Urgenda* decision

The June 2015 decision of the District Court of The Hague in *Urgenda v. The Netherlands* may provide some hope. The Urgenda Foundation, a non-governmental organization, submitted that the Netherlands' policy to reduce GHG and CO2 emissions to 17% below 1990 emission levels by 2020 did not fulfil the country's domestic and international law obligations. It further submitted that this policy contravened Holland's duty of care arising from the international no-harm principle, the UNFCCC, and the right to life guaranteed by the European Convention on Human Rights.

The Dutch court accepted that anthropogenic GHG emissions are causing climate change. Importantly, it accepted as certain the IPCC's finding that emissions are increasing, and concurred with the IPCC that a global temperature increase of more than 2°C would lead to an extremely dangerous situation for humanity and the living environment. It therefore concluded that a reduction in the current rate of GHG emissions was necessary to avoid catastrophic consequences.

The court found that "the state is obliged to take measures in its own territory to prevent dangerous climate change" and that "the state has acted negligently and therefore unlawfully towards Urgenda by starting from a reduction target for 2020 of less than 25% compared to the year 1990."

In asserting that the Netherlands was obligated to take measures immediately, the court accepted that current emissions reduction targets are insufficient to achieve the 2°C IPCC target, and that without immediate and far-reaching remedial measures achieving this goal will be impossible by 2030.

In other words, the court held that states are responsible for the well-being of their citizens, and it is unlawful for them to pursue mitigation policies not in line with those mandated by the IPCC.

To arrive at this decision, the court found that because of the global nature of the hazard, and the necessity of shared management to prevent impairment of the living climate, the state's discretionary powers under the Dutch constitution (Article 21) did not prevent judicial review. To then determine and balance the state's discretionary power and its duty of care toward its citizens, the court looked to the UNFCCC (Article 3) duties regarding fairness, precautionary measures and sustainability. Two key considerations flowed from the fairness principle, according to the court: the need to protect future generations from being disproportionally burdened by the consequences of global warming, and the recognition that industrialized nations primarily responsible for global warming are best able to combat it.

It was further determined that by becoming a party to the UNFCCC, the Netherlands had accepted a duty to reduce GHG emissions as much as necessary to prevent dangerous climate change. In addition, the court held that governments have a crucial role in enabling countries to transition to more sustainable societies. It therefore concluded that the Netherlands was obligated to make laws that ensured that IPCC emission reduction targets—necessary to preserve a living environment—were met.

Looking to the courts in Canada?

To date, legal obligations arising from the UNFCCC, uncontroverted science, and the entreaties of experts have not been able to move the government of Canada to fulfil its obligation to reduce GHG emissions to a level sufficient to create a 50% chance of avoiding catastrophic climate change. Even ridicule has proven ineffective: in 2013, Canada received, for the fifth year in a row, the Colossal Fossil award given annually by 700 NGOs to the country that has done the most to inhibit global warming solutions.

Past attempts to have courts restrain Canada's recklessness were not successful. In December 2005, Sheila Watt-Cloutier, with the support of the Inuit Circumpolar Conference and many affected individuals, sought relief from the Inter-American Commission on Human Rights for violations resulting from global warming caused by the United States and Canada. The commission declined to consider the petition on the basis that it did not contain sufficient information to make a determination.

In 2008, the Federal Court of Canada in *Friends of the Earth v Canada (Governor in Council)* refused to review the executive's actions regarding its Kyoto commitments, citing accountability arrangements existing in the Kyoto Protocol Implementation Act, a law passed to keep the government on track with its climate change commitments. Then, in 2012, the Federal Court in *Turp v Canada (Attorney General)* stated that the executive's authority to enter into (and withdraw from) treaties stemmed from the royal prerogative, an ancient source of arbitrary power held by the British monarchy. As such, it concluded that the Kyoto Protocol Implementation Act could not restrict this power and that the courts could not intervene in such cases unless a Charter right was involved.

Although constitutional principles indicate that any prerogative power not specifically preserved by statute was extinguished by the Charter's rule of law provision in 1982 (when Canada gained full legislative independence from the United Kingdom), this issue remains contentious, as demonstrated by both the *Friends* and *Turp* cases. However, such uncertainty doesn't obviate the need to seek a judicial remedy. Indeed, it was conceded in *Fogal v Canada*, another Federal Court case, that the legal issue of the present scope of prerogative powers is "not moot."

Given the severity of the hazard posed by global warming, and the imminent threat posed by Canada's failure to commit to reducing GHG emissions to 25–40% below 1990 levels by 2020, it is critical that the courts be called upon to force Canada to set and achieve IPCC-compliant GHG reduction targets. In any future judicial review case, the executive would be hard-pressed to argue that meeting IPCC targets would slow down the economy: scientific consensus indicates the economy will collapse with environmental degradation and that a transition to a more sustainable society will indeed revive it.

Like the Netherlands, Canada has a legal duty—arising from the Charter, the International Covenant on Civil and Political Rights, and the American Declaration on the Rights and Duties of Man—to safeguard the lives and well-being of all people within its territory. Under the UNFCCC, Canada has specific duties to "achieve... stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." Canada's GHG emissions reduction policies and performance contravene all of these duties.

CANADA'S CLIMATE PROFILE: KEY DATES

1992 | Canada signs and ratifies the United Nations Framework Convention on Climate Change (UNFCCC).

1994 | The UNFCCC enters into force in Canada.

1998 | Canada signs the Kyoto Protocol.

2005 | The Kyoto Protocol enters into force in Canada. It commits Canada to reducing GHG emissions to an average of 6% below 1990 levels between 2008 and 2012.

2010 | Under the 2009 Copenhagen Accord, Canada commits to reducing GHG emissions by 17% below 2005 levels by 2020.

2012 | Canada formally withdraws from the Kyoto Protocol.

2015 | In advance of the Paris Conference of the Parties in November, Canada announces that it will commit to a reduction in GHG emissions of 30% below 2005 levels by 2030.

The Paris talks

There are high hopes that states attending the 2015 United Nations Climate Change Conference in Paris from November 30 to December 11 will for the first time agree on a legally binding agreement to set and achieve GHG emissions reductions necessary to preserve life as we know it. Any future agreement, especially a legally binding one, is only as strong as its weakest link. Canada's announced commitment may once again undermine global attempts to agree on effective solutions to combat climate change.

A successful legal challenge of Canada's GHG emissions policies and performance may be the only means of protecting our environment and the health of generations to come. M

A LONGER FOOTNOTED VERSION OF THIS ARTICLE CAN BE VIEWED AT WWW.LRWC.ORG.

Emily Eaton

Clean coal, green oil

How SaskPower is greenwashing carbon capture

THERE IS LITTLE doubt that Saskatchewan is in dire need of a concerted and aggressive climate change strategy. Of Canada's provinces, Saskatchewan has seen the greatest rise in greenhouse gas (GHG) emissions since 1990 (72%) and now accounts for over 10% of the country's total. With just 3% of the Canadian population, Saskatchewan is now the largest per capita emitter in the country.

With little in the way of a comprehensive provincial strategy to combat climate change, the Saskatchewan government has regularly touted its investment in SaskPower's carbon capture and storage (CCS) technology, calling it a "pioneering" and "leading edge means to reduce greenhouse gas emissions in the province." Given how much the Saskatchewan government appears to have staked on CCS, it is all the more important to understand how the leadership of SaskPower views the future of this technology and its role in mitigating GHG emissions.

SaskPower's CCS symposium in Regina on October 5 provided employees with a glimpse of this future. Unfortunately, it revealed that leadership at the Crown corporation seems to be pursuing conflicting and even contradictory goals when it comes to the application of carbon capture technology as an actual climate mitigation strategy.

Contradictory goals at SaskPower

Although they tout "clean coal" as an environmentally beneficial technology, SaskPower's leadership does not appear primarily motivated by concern for the environment or climate. This was made patently clear when they discussed the future for "clean coal" in the province and their plans to build a capture facility for units 4 and 5 of the Boundary Dam power station (pictured).

Planning and design for the current capture plant on unit 3 began before new federal regulations on coal-fired electricity were passed. Not knowing how stringent the regulations would be, the Crown corporation built the unit 3 capture plant so that it would capture 90% of emissions—a very high rate. However, the 2012 regulations only require coal-fired plants to bring their carbon emissions down to levels that match natural gas–fired plants (420 tonnes/GWh). Significantly, they require this standard on each unit.

SaskPower is currently hoping the federal government will allow for provincial substitution of federal regulations in a way that would allow plants to average their emissions across units so that some units could produce more emissions than the regulatory cap as long as the discrepancy is made up by units that produce well under the cap. This would allow SaskPower to apply the significant difference between its current capture facility on unit 3 and the regulatory cap to capture plants on units 4 and 5, bringing down the production costs for the new units.

SaskPower's leadership appears wedded to the coal industry.

In essence, SaskPower is doing everything it can to only meet the bare minimum emissions targets, and it wants to use its highly successful capture rate on unit 3 as a means to reduce how much carbon will be captured on subsequent units. SaskPower's leadership appears wedded to the coal industry, and its whole strategy revolves not around what might be the best electricity mix for the province and the environment, but on self-preservation and the maintenance of the coal industry.

Playing the jobs card

One of the speakers at the October symposium engaged in scare mongering when he warned SaskPower employees in the audience that their jobs and even the corporation itself might be at stake if they can't make clean coal work. He implored them to become "ambassadors of clean coal," and to go home and tell 10 people about the wonders of CCS. He talked about a brand new natural gas–fired plant that will be built in the Swift Current region and whose construction and operation is currently being bid on by the Crown corporation and private power companies. He warned that SaskPower might not get the contract, nor is it guaranteed to receive any future natural gas–fired plant contracts.

Given this uncertainty, this speaker argued that the corporation's best bet is to bring its coal-fired fleet into regulatory compliance through carbon capture. Another speaker delved into the business case for CCS and commented that socioeconomic considerations were also taken into account (e.g., we should consider whether we want a coal industry in Saskatchewan). According to him, stats about employment and royalties from the coal, and oil and gas industries (all three benefit from CCS) factored into the decision to pursue "clean coal."

SaskPower is positively giddy about increasing Saskatchewan's oil production, apparently unaware that this goal is in direct conflict with mitigating GHG emissions. Nearly every speaker at the symposium emphasized a graph showing oil production in the Weyburn oil field in the province's southwest, and the success that Cenovus has had producing more oil through carbon dioxide flooding.

Not only does SaskPower's business case rely on oil companies paying for the captured carbon for enhanced oil recovery, but the people in charge of the project see increased oil production as a marker of success. One speaker even made the argument that SaskPower is enabling "green oil" production, since the oil coming out of the Weyburn field is relatively clean (I think he meant light) and less energy-intensive to produce than other oil projects.

If more CCS units are built, SaskPower will need more buyers for their CO_2, meaning more "green oil" will be produced. When I inquired about the emissions from the Weyburn oil field, the presenter said that would be part of a life-cycle assessment, and not of concern to SaskPower.

The power of the Crowns

Multiple speakers at the symposium emphasized that as a Crown corporation, rather than a private company, SaskPower is able to shoulder the significant capital costs of the CCS project; it didn't have to work for the short-term interests of shareholders, but rather for the long-term interests of the consumers of electricity. That's why private power companies in Alberta abandoned CCS, but Saskpower was able to push forward.

I couldn't agree more that we should harness the benefits of our publicly owned Crowns. Imagine what we could do with this same level of commitment directed toward principles of environmental and social justice. We could shoulder significant capital costs in order to build a system that transitioned away from coal and produced jobs in local communities across the province through renewable energies that are truly green, and not just greenwashed. M

Gordon Laxer

Alberta: Fossil-fuel belt or green powerhouse?

An excerpt from the book *After the Sands*

Thirty years out, we won't be burning hydrocarbons the way we do today. Our enemies may not be at the door yet, but they are beginning to circle around Alberta.

—Clive Mather, former CEO of Shell Canada, 2011

REGIONAL BATTLES OVER energy and the environment loom. Who will win and who will lose when Canada shifts to a low-carbon future? If Albertans see a positive, job-creating plan that gradually weans their province off the Sands, they will react differently than if they see themselves as the big losers. Peak oil, general resource depletion, climate change disasters and energy security in a post-9/11 atmosphere cast new light on national unity and regional issues.

"Shut down the tar sands," says Greenpeace. While I agree with the sentiment, it would be a disaster if it happened right away. The Sands are too central to the economy and lives of Albertans. The challenge is to convince many Albertans and the Notley government that the present course is no longer viable, that phasing out the Sands is pro-Alberta and pro-Canada.

The Premier's Council, a group of corporate executives and former Conservative cabinet ministers, urged Alberta in 2011 to plan for a post-Sands economy. "We must plan for the eventuality that oil sands production will almost certainly be displaced at some point in the future by lower cost and/or lower-emission alternatives," the group warned. Despite the council's pedigree, the call fell on deaf ears. The stick-with-the-Sands crowd still runs Alberta's economy and may well tame its NDP government.

After flying over the Sands in 2006, Peter Lougheed, the man who started Alberta's Conservative dynasty (1971–2015), remarked: "I was just up there on a trip, just helicoptering around, and it is just a moonscape. It is wrong in my judgment, a major wrong, and I keep trying to see who the beneficiaries are. Not the people in Red Deer, because everything they have got is costing more. It is not the people of the province, because they are not getting the royalty return that they should be getting." Lougheed also said it was time to "consider an increase in corporate and personal taxes" and orderly development—not more than two Sands projects at a time. And if the oil companies didn't like that, he stated, "we are the owner and we have the mandate to do that." Lougheed advocated processing as much bitumen as possible in Alberta.

Oil or tar?

Let's call it the Sands.

I don't use the phrases "oil sands" or "tar sands." These terms were used interchangeably by the industry in Alberta until the mid-1990s when the industry and Alberta's Conservative government rebranded them "oil sands" only to improve their image. The correct term "bitumen" is technical sounding and awkward.... In Alberta, it's almost impossible to avoid being part of the effort to rebrand the Sands. To lower the debate's temperature I use the neutral term "Sands" throughout the book.

The Alberta NDP's "Green Energy Plan" calls for similar things. Mandating that "at least the value added/upgrading for all bitumen mined in Alberta be done in Alberta," the NDP also calls for a "Green Energy Fund" based on higher royalties to support renewable energy. It's a strong environmental and pro-union variant of Lougheed's strategy. Why did Alberta's NDP adopt Lougheed's position? It's not that Lougheed shifted left after leaving the premier's office, but that the Conservative Party he led moved so far right. Equally, Canada's left-wing party, which used to advocate nationalizing the oil industry, something supported by half of Canadians as recently as 2005, has shifted rightward.

The Lougheed/NDP strategy of upgrading and refining resources in Alberta assumes that a narrowly based resource economy cannot afford to wait for markets or corporations to magically discover that Alberta's comparative advantage lies in diversifying the economy. Instead, they call on governments to lead in *creating* a comparative advantage beyond extracting raw resources. Lougheed put it this way: "You always have to keep in mind that we're the owner of the resource, the people. We should always be in a position where we could change the royalty rates....[When I was premier, our government] would not give licences for oil sands development that were just in the mining side, but [would give licences] that required an upgrader. It's crucial to pace the boom to reduce inflationary pressures and get higher economic rents for the owners and the government."

Economic linkage

Lougheed describes the capitalist development model around a resource base that Mel Watkins, one of Canada's foremost political economists, articulated so well in 1963. The key to Watkins's "staple theory of economic growth" is to develop three diversification prongs that are closely linked to the exported resources. The prongs are "forward, backward and final demand linkages." Rather than export resources only to import them back as finished goods, "linkage" means they are produced at home. In the past, Alberta and other Canadian resource-based regions implemented "forward linkage" strategies to force industry to upgrade resources to intermediate goods before exporting them. In oil it was around bitumen upgraders, refineries and petrochemicals. Jobs are created this way, but far fewer than if diverse consumer goods were made from oil, natural gas or wood.

Under the deregulation required for free trade, though, even limited policies of upgrading or forward linkage, were ended and the related sectors declined sharply. "Backward linkages" enable the resources to be extracted and can include road-building, pipe for pipelines, and machinery such as oil derricks and super-sized trucks that remove the forest floor over the Sands. Alberta imports the vast majority of goods needed for this work. According to *Bitumen Cliff*, a report by activist and scholar Tony Clarke and others, over $20 billion a year had been spent in Alberta on "machinery and equipment purchases, driven in large part by the enormous capital spending associated with bitumen developments.... Most of the heavy trucks used in the bitumen sands mining are manufactured by Caterpillar in the U.S.—a company that just closed its only Canadian manufacturing facility.... The end result is the emergence of a large and growing trade deficit in machinery.... This trade deficit reached over $7 billion in 2011."

Healing Walk 2013
© Ben Powless

Branching out from oil and natural gas could lead to the manufacture of everything made of plastics, as well as solvents, fibres, pesticides and coatings—a final demand linkage. Alberta never got far down that path, but had a successful petrochemical industry in the 1970s to 1990s based mainly around turning natural gas into intermediate goods like ethylene and propylene, mainly for export to the U.S., where they were converted into polymers (plastics), solvents, resins, fibres, detergents and ammonia. Most jobs built upon Alberta's oil and natural gas were exported. Alberta was stuck in a narrow, semi-industrial rut, dependent on external demand for its oil and natural gas.

Alberta lost much of its petrochemical industry. Its comparative advantage lay in low natural gas prices in Alberta based on limited pipeline takeaway capacity. That advantage vanished when Big Oil and natural gas interests beat out a pro-diversification alliance of the petrochemical industry and its workers to open a gas pipeline to Chicago in 2001. Alberta's petrochemical industry contracted. Retreat from Lougheed's limited diversification strategy showed that an economy can slip back to a "pure staple economy" exporting its raw resources.

"Final demand linkage," the third diversification prong in Watkins's theory, is a market way for domestic industry to emerge around resource workers who are numerous enough to consume a broad array of locally produced goods and services. If the population grows large enough, it can sustain economic activities that have nothing to do with the original resource, thriving even when the resources decline. This is true diversification. Calgary and Edmonton are now cities with populations over a million—enough people to potentially sustain a diversity of sectors in ways that Saskatoon and Regina in neighbouring Saskatchewan cannot.

Mostly, though, Alberta's potential has not yet been realized. When the best money can be had in raw oil and natural gas, why bother with alternatives? The Lougheed/NDP diversification strategy depends too much on a passive market paradigm and runs the risk of resource depletion or boycotts against environmentally destructive extraction and upgrading. Even if successful, it will create workers and businesses whose economic interests lie in hindering the preservation of nature, reduced oil use, and the switch to wind, solar and deep geothermal to power up electric cars, trains and rapid public transit. I used to support this model, but now I think it's a dead end for Alberta and other provinces, because it bets that the age of easy oil and other carbon fuels will continue. It relies too much on resource extraction and ignores the enormous environmental damage of upgrading and refining bitumen.

A better way is deep diversification. Instead of relying mainly on exporting resources or anything else, governments become drivers and planners of a more "inwardly directed" economy. But we must ease ourselves off the old economy gradually, not drop it like a stone. True diversification depends on Alberta collecting high royalties and other economic rents and using them to fund the development of new sectors. Building bridges to the next economy will be pricey. The key is to wring more from the old economy as we transition off it by charging much higher royalties on Alberta's carbon fuels. Norway is the exemplar.

Two cheers for Norway

Amidst gloomy talk of an international "resource curse" and the autocratic, corrupting influence of oil, Norway stands out as the only bright light. Helge Ryggvik writes about the amazing kudos he and other Norwegian oil experts get when visiting other oil-producing countries. Norway's oil policy is widely regarded, Ryggvik writes, "as the only successful example where a country, after discovering oil, has built a competent national oil industry, yet still has managed to maintain an egalitarian welfare state." With five million people, Norway took on Big Oil, asserted national sovereignty and got most economic rents, or "non-renewable depletion charges," to benefit Norwegians.

I give Norway two cheers, not three. Norway is impressive, but it has slid back from its best days, in the 1970s and 1980s, of standing up for Norway's people, the ultimate owners of its energy bounty. That's when Norway set up government-owned Statoil and created a thriving national oil-servicing industry from scratch. Norway's gigantic oil pension fund resulted from those early victories. Norway's earlier sovereignty approach to water and forests informed its oil stance in the 1970s. Labour's left-leaning government quickly took public ownership over Norway's offshore energy resources. But lacking enough oil competence, technology and capital, Norway invited in foreign oil corporations to start things off. After a learning period, the government planned to Norwegianize the oil and natural gas industry under public ownership.

After U.S.-based Mobil Oil had operated the Statfjord field for 15 years, Statoil, the new government-owned oil firm, took over in 1987. In two decades, Norway had become the world's third largest oil exporter. Like elsewhere in Europe, the generation of "1968 youth" radicalized Norway. But they had a more left-nationalist hue, like their counterparts in Canada who pushed Pierre Trudeau's government to set up Petro-Canada. In Norway's

Alberta's got the wind
Photo by CanWEA

historic 1972 referendum, voters chose sovereignty over joining the European Economic Community. This decision coincided with a surge of economic self-assertion in the newly decolonized Global South, where one oil corporation after another was nationalized or newly set up.

In this context, Norway started Statoil and issued the ten commandments of oil that included envisioning domestic control to serve the national interest, fostering backward linkages to a thriving domestic oil service industry, gaining forward linkages by processing goods from oil, ending dependence on foreign oil supplies, and doing it all with ecological integrity. For Ryggvik the oil commandments were ways "to ensure 'national governance and control.'" Oil wealth was to be used to create environmentally friendly resource development and a "qualitatively better," more equal society. Local society was to be enhanced. Oil development was to be slow, avoiding uncontrolled growth typical of profit-driven Big Oil.

But under neoliberalism's onslaught, starting in the late 1980s, Statoil was one-third privatized in 2001 and told to act like a for-profit oil corporation. Statoil now tries to capture other countries' economic rents, contradicting the commandment that natural resources benefit the whole community, and pursues oil opportunities and quick profits abroad with the same zeal as ExxonMobil and Shell. Nevertheless, Norway's early oil independence quest shaped its current international leadership in capturing and saving economic rents.

Norway's very generous welfare state is funded substantially by oil revenues collected and saved in its "Pension Fund." Several establishment voices advise Canada to follow Norway in saving economic rents, but not the rest of Norway's model. A C.D. Howe report by Leslie Shiell and Colin Busby calls for Alberta to save even more than Norway. *Our Fair Share*, a report commissioned by Alberta's Conservative government, counsels copying Norway in maximizing royalties. Norway captures most of the "economic rents" by combining government ownership with imposing very high economic rent charges on oil transnational corporations. Norway adds a 50% special tax for petroleum companies to a general 28% corporate tax base, to capture 78% of net petroleum profits from the private sector. While this rate looks good, Norway abhors giving away the other 22% of unearned profits. To counter this, Norway owns two-thirds of Statoil, and all of Petoro, which manages oil and gas licences. Norway collects *all* the gross rents from the 40% of the sector that is publicly owned.

Norway's example is laudable in many ways, but it is locked into supporting carbon-fuelled growth. Its oil fund removed fears that moving too quickly in carbon-fuel extraction would overheat the domestic economy, so Norway had a shorter, sharper oil boom than its go-slow commandments of acting environmentally responsibly originally envisioned. Instead of sustaining lower output for much longer, oil production started down the slope to terminal decline in 2002. Norway's huge oil fund also makes it a "rentier state." Classical economists from Adam Smith to Karl Marx condemned rentiers on the grounds that no one should enrich themselves without contributing work. By investing in for-profit entities abroad, Norway contradicts its ethos of popular national sovereignty. Instead, Norway is a giant absentee owner without connection to the people and land in which much of its money holds power.

Rock-bottom economic rents in Alberta

Many think of royalties as taxes. Any government fee must be a tax. Wrong. Private woodlot owners and musicians collect royalties. No one calls them taxes. When governments collect royalties they aren't taxes either. Royalties are one way to capture economic rents. Leases, ecological charges and corporate taxes are other ways. Government ownership of resource companies is the only way to collect all the rents.

"The oil sands are owned by the people," Peter Lougheed insisted. "They're not owned by the oil companies." He urged Albertans to "think like an owner" and levy their fair share of royalties. Governments in Canada own most of the subsoil resources on Crown land. In Alberta, the province owns 81% of the subsurface mineral rights, while the federal government owns 11% (including national parks and First Nations reserves), and 8% is owned by individuals or companies. At 17%, private ownership is a little higher in Saskatchewan. The federal government has formal ownership in the territories and offshore but shares jurisdiction with territorial governments and ocean-side provinces through agreements.

Saving rents matters too. *Globe and Mail* reporter Eric Reguly contrasts Norway's long view with Alberta acting greedily and deciding "that a drunken, blow-out dance party today was better than a string of candle-lit dinner parties down the road." Most other oil-producing jurisdictions squander oil rents, too. Norway invests all economic rents to avoid "Dutch Disease." Otherwise Norway's kroner would spike and hurt domestic manufacturing and other sectors. Norway collects much more economic rent than Alberta, although its oil output is lower and its natural gas output and production costs are similar.

Norway has advantages, though. As a maritime country, its oil gets a higher price and its natural gas a much higher price than landlocked Alberta's. Higher prices give the state much more room to capture economic rents on the same energy output. Even so, Alberta has had huge rent potential but wasted it. Parkland Institute's Regan Boychuk showed that Alberta gave away $121 billion in "excess" pre-tax profits between 1999 and 2008. Excess profits are unearned profits derived from the value of public lands—what's left over after the costs of exploration, development and operations and a normal rate of profit (10%) are subtracted. Instead of Albertans getting the economic rents, as the owners of the resources, the excess profits were handed over to Big Oil in an act of "misplaced generosity," according to Boychuk.

Norway gets much higher rents than Alberta, in large part because of

Rachel Notley (left), then the Alberta NDP environment critic, examines a deformed fish caught in Lake Athabasca in September 2010.

Photo by Jason Franson / The Canadian Press

higher taxes and especially its public ownership stake. Norway wiped out its national debt and created an elephant-sized oil pension fund worth C$1.1 trillion and growing—making Alberta's older Heritage Fund look like a mouse at $17.2 billion. Alberta can't catch Norway. But if it starts collecting at Norway's level, Alberta could have substantial funds to finance the transition to a low-carbon economy.

Alberta's previous Conservative governments claimed that its economic rents, among the world's lowest, attract investment that would otherwise not come. This is false. Alberta and Canada have immense advantages over many oil sites in the Global South: political stability, first-class infrastructure and skilled workers. Jeff Rubin states that Alberta has 50–70% of the world's oil still open to private investment, which should be a great bargaining chip.

Kuwait pioneered oil funds in 1953 to provide for future generations and reduce reliance on a single non-renewable resource. Its fund is now over $200 billion. Alberta was an early adopter, having started its Heritage Fund in 1976, nineteen years before Norway. Peter Lougheed's Conservative government set up the fund to spur economic diversity. Alberta put 30% of its resource revenues into the fund, which reached its peak in 1987. At $12.7 billion then, it would be over $25 billion in today's dollars, 50% more than today. In 1988, Alberta stopped adding resource royalty revenues to the fund and put all the fund's income into general revenues. While much lower than they should be and wildly varying from year to year, direct and indirect oil and natural gas revenues still fund one-fifth to one-third of Alberta's government spending. Investment income from the Heritage Fund adds another 6%.

Instead of relying on economic rents, Alberta should boost royalties and put all of them into the fund. Like other provinces, it should pay for all government services through adequate taxes. The Alberta NDP established a Resource Owners' Rights Commission to review Alberta's royalty rates. If the commission recommends raising royalties and the Notley government concurs, the NDP has promised it will put 100% of the increased royalties into the Heritage Fund. That implies the province will leave revenues collected at the existing royalty rates as general revenue.

The Heritage Fund lapsed because Alberta embraced the neoliberal idea that the market, meaning large corporations, not governments, should decide what Alberta's comparative advantage is. Alberta's laissez-faire approach is to remain the lowest tax jurisdiction in Canada in the hope that it will attract footloose industries. But this has never happened. Alberta is more than ever an oil and natural gas province. Corporations from around the world invest in Alberta because that's where the petro-resources are, not because Alberta has no provincial sales tax.

False spring

In 2007, it looked like Alberta might finally stop its giveaways to giant oil transnational corporations. Ed Stelmach, Alberta's Conservative premier, set up a panel to review the province's oil and gas royalties. The panel's *Fair Share* report showed Alberta's take was far below that of Norway and Venezuela, and well below that of Texas, Wyoming, Colorado and California, jurisdictions known as Big Oil–friendly. Two-thirds of Albertans backed the report's call for higher royalties.

Bill Hunter, former president of Al-Pac, a giant forest corporation in northern Alberta, chaired the royalty review panel. Hunter counselled Alberta to collect all the rents from its non-renewable energy resources. "As Albertans, we own 100% of the resource, and we should expect nothing less than 100% of the rent. It's up to industry to convince us that we should take a decrease."

The panel's trenchant analysis contrasts with its timid recommendations, which would have left Alberta's royalty rates lower than those of the U.S. states mentioned above. But even so, powerful oil transnationals in Calgary saw red and counterattacked by trying to scare the public. You will kill Alberta's golden goose, we will leave, and Albertans will lose, was their message. After a year of record profits, a corporate CEO told the panel, "It's a myth out there that this is a hugely profitable business." But he confided to investors at the time that his company's Sands project will produce a "wall of cash flow sustainable for decades." Meanwhile, Roland Priddle, former head of the National Energy Board, was in Texas to pitch Alberta as a great place to invest. "Where else can you purchase in-place oil [well, bitumen] for one cent a barrel?"

Stelmach blinked and timidly raised royalties only a little. Critics cried sellout. But amazingly, Big Oil aggressively attacked Alberta's modest royalty "hike" and moved rigs out of Alberta to scare people. While they peddled their hard-luck story, oil transnationals' take of economic rents from Alberta rose to new heights. Boychuk's report shows that oil and gas corporations' share of "excess profits" in Alberta rose from 35% in 2006 to 66% in 2008. Despite this, Calgary's petro-elites were fighting mad. Many helped bankroll the Wildrose Alliance party, which promised rock-bottom royalty rates again. Stelmach quickly reversed course, met with the petro-corporations and excluded the public. To applause from the oil transnationals, Alberta dropped royalties. Fifty-eight per cent of Albertans were opposed to this reversal, a harbinger of the NDP breakthrough in 2015.

Expect a repeat scare performance by Calgary's oil patch in response to Notley's royalty review. Big Oil will argue that conditions are not right to raise royalties. Capital strike or capital flight may see oil rigs pull out and exploration decline. It could be a great show. Will Notley's government blink like Stelmach's did, or will it tough it out? As long as it shuns the economic nationalist and radical egalitarian underpinnings that made Norway's model such a success, Alberta and Canada will not collect and save rents at Norway's level. But only by doing so can Alberta readily fund its transition to a truly green economy.

Alberta's green conversion

Making Alberta a less energy-focused economy can create many jobs. Out of 56 sectors, oil and natural gas extraction and mining are dead last in the creation of jobs for every million dollars invested. If much higher royalties are collected and put into health care and education, five to seven times as many jobs are created as would be if the same amount were put into oil and natural gas output. A green-energy economy is coming. Globally, it's already worth more than $4 trillion. Little Denmark is a leader in wind energy, which generates over 10% of its exports and 39% of its electrical power and has created 28,000 jobs. Germany's renewables sector employs over a quarter of a million workers. Good things can come to pioneers. Danish companies have installed over 90% of the world's offshore wind turbines. Alberta could still become a leader in specialized green energy technology and services, like ultra-deep geothermal power. But if it waits too long, Alberta will import most of its green infrastructure and expertise from abroad. That means exporting jobs and losing out on the transition off the precariously narrow Sands.

What could Alberta's transition to a post-Sands economy look like? Independent public policy consultant David Thompson's report, *Green Jobs: It's Time to Build Alberta's Future*, provides a good preview. He focuses on quickly reducing energy waste. Alberta's coal-based electricity generation emits almost five times as much greenhouse gas as Canada's average power generation, and releases pollutants that cause smog, acid rain, asthma, respiratory and cardiac problems, heart attacks and cancer, he writes. Coal-fired power helps make Alberta an environmental pariah, by adding huge carbon emissions to the enormous levels caused by the Sands. Coal-fired power must quickly be replaced. Sands construction workers could be better employed retrofitting buildings and constructing new light rail transit, bus lanes with their own rights of way, and a high-speed train between Calgary and Edmonton. These changes would facilitate active transportation—transit, walking and cycling—and make neighbourhoods more vital and less energy intensive.

Many oil and gas workers will be laid off as we switch to a green economy. Thompson advises Alberta to fund retraining and financially support workers being retrained, like the American Recovery and Reinvestment Act did after the 2008–09 Great Recession, putting over a billion dollars into green jobs training. The Great Recession hit Alberta harder than it did other provinces. Full-time jobs fell by over 100,000 from August to December 2008 and were slow to return. Alberta nose-dived again after oil prices crashed in late 2014. Green jobs would be a very attractive alternative for Sands construction workers because they are spread more evenly across rural and urban areas, enabling workers to live in their communities with their families rather than commuting to remote Fort McMurray, Thompson writes.

Green jobs will come mainly in energy efficiency, renewables, transit and more labour-intensive, less toxic farming. The quickest, biggest bang lies in public investment in energy efficiency and retrofitting buildings, which should be scheduled during the resource bust periods that always follow Alberta's booms, like in 2015. It's cheaper during these times and would give useful work to construction workers laid off from oil and gas projects. Public spending will kickstart most green jobs at first, but a mix of public spending and government policies that induce private spending will keep them going.

Can the provincial government afford to pay for the greening of Alberta? Yes. Even after its great royalty giveaways and a major deficit in

2015 caused by falling oil and natural gas prices, Alberta is the only province with positive net financial assets: $8.8 billion. It also has large capital assets—$45.3 billion, which includes the Heritage Fund—so its total net assets are $54.1 billion. Despite low projected energy prices, Alberta's assets are not expected to fall over the next five years. Alberta should not fall behind.

Framing it as going green to gain national energy independence, the U.S. is reducing energy waste and curbing carbon emissions. U.S. states and municipalities used nearly $8 billion in federal funds to upgrade energy efficiency. Washington aims to weatherize a million homes a year and improve energy efficiency in commercial buildings. Japan and Korea also adopted green stimulus packages, each proposing to create a million jobs. Demonstrating that not all greening requires government spending, Germany boldly moved ahead with feed-in tariffs for electrical power. The grid pays more for energy from renewable resources and rolls those costs into consumers' power bills. To prevent those bills from rising too much, a massive insulation retrofit would lower energy usage. Following this example could mean lower natural gas usage, and perhaps lower costs for Albertans, to offset rising power rates.

Alberta lacks good hydro sites, but has excellent wind sites just east of the Rockies and good potential for solar. Thomas Homer-Dixon promotes ultra-deep geothermal power for Alberta: "We drill holes eight to ten kilometres into Earth's crust, pump down water, then bring it back to the surface—super-heated—to drive electrical turbines." Homer-Dixon also supports underground coal gasification, which, in contrast to burning coal on the surface, leaves it in the ground. Alberta need not be self-sufficient in electrical power generation, though. Alberta sells oil to British Columbia and Manitoba. Why should those provinces not sell clean hydro power to Alberta instead of to the U.S.? That way, Albertans' power bills need not rise to get green power.

David Thompson contends that green jobs are good local jobs with a living wage and are "stable and less susceptible to volatile global commodity prices." Most are in fields in which people already work: construction, manufacturing, engineering and finance. Workers will get the added satisfaction of making a difference. A side benefit would be that more Alberta workers would likely welcome rather than block moves away from a carbon economy. Thompson projects tens of thousands of longer-term jobs in building more light rapid transit lines in Edmonton and Calgary that will achieve denser, truly transit-oriented cities, reduce commuting times and end urban creep onto good farmland. Two-thirds of Albertans support provincial funding of a high-speed rail link between Calgary and Edmonton. Once built, Alberta would join Europe, China and the U.S. in replacing many medium-distance flights with high-speed rail. A rail trip from London to Madrid, for example, causes one-sixth the carbon emissions of a flight.

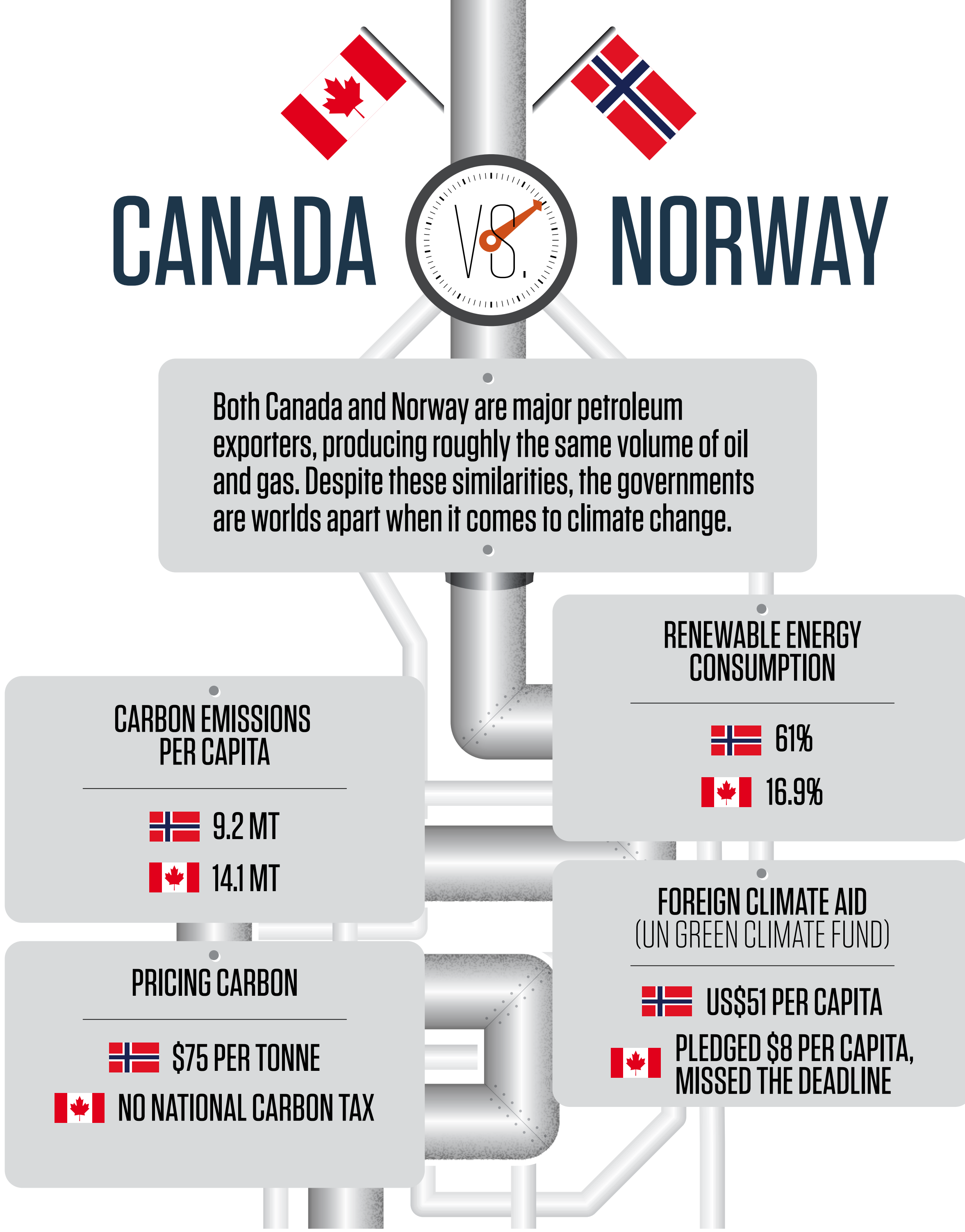
How can Alberta afford so much new rail and rapid transit? Alberta spent $10 billion on highways and city roads between 2008 and 2011 to fund excessive auto use. Instead, Alberta could spend sufficiently on road maintenance and transfer most existing funds to new light rail transit and trains. Sands construction workers could be redirected to these projects. About ten times as many workers build Sands projects as operate them. Most of the green economy work would be for a one-time switchover, though. You retrofit a building and put in a high-speed link between Alberta's main cities once. What kinds of jobs could sustain Albertans in a low-carbon economy in the long run?

Thompson proposes an Alberta Renewable Energy Corporation, a provincial Crown agency "to accelerate the development of renewable energy manufacturing capacity in Alberta.... The Crown corporation would immediately purchase inputs and begin to build the renewable manufacturing infrastructure." It would operate on a commercial basis. This may seem like a radical idea, outside of Alberta's private enterprise tradition, but it's not. Alberta Treasury Branches, founded in 1938, is a government-owned bank that operates 164 branches and 133 agencies in 244 communities throughout Alberta. It's a very Albertan institution. The Alberta Energy Corporation was set up by Peter Lougheed in 1973 as a public-private vehicle for Alberta to directly participate in the Sands, though it was later privatized. Using a Crown company to spark a green energy industry in Alberta is a good bold idea, but it needs fleshing out. Overall, the *Green Jobs* report relies too heavily on construction. Like construction in the Sands, a green retrofit will only temporarily employ Albertans.

It's crucial to avoid an abrupt shift to a low-carbon society. We must transition off the Sands and develop a vision and plan for what's next. The first step is to cap and then phase out the Sands over 15 years, starting with the oldest projects. Meanwhile, new industries and jobs must be created around a green economy that builds on Alberta's highly educated and skilled workforce. Alberta's economy can be diversified. After the oil price crash of the 1980s, Texas rebuilt itself as a leading centre in aerospace, military equipment and computer technologies. After the steel industry collapsed, Pittsburgh transitioned to a hub for health care, robotics, banking and education. Alberta can build from its promising start in biotechnology, financial services, telecommunications, medical research and development, and environmental technologies.

Once moving off the Sands is underway, new economic sectors, workers and voters will emerge whose interests are best served by continuing the transition. The momentum could be sustained. An Alberta no longer beholden to Big Oil can benefit all Canadians immensely. Instead of blocking the greening of Canada, Notley's Alberta government could lead the way. "I can imagine an Alberta without oil, but not without water," Peter Lougheed observed. There are far better alternatives for Alberta than to be stuck with its head in the Sands. **M**

TAKEN FROM *AFTER THE SANDS: ENERGY AND ECOLOGICAL SECURITY FOR CANADIANS*, AVAILABLE NOW FROM DOUGLAS & MCINTYRE.



Norway's parliament directed its trillion-dollar sovereign wealth fund to divest from companies taking more than 30% of their revenues or power production from coal.

The Norwegian government brought in a number of incentives to encourage the use of electric vehicles, including the availability of free public charging stations, toll-free roads and ferries, and allowing electric cars to use bus lanes. Norway has become the world's largest electric car market with a 14% market share in 2014.

With Canada's hodgepodge of provincial incentives, it is hardly surprising that plug-in electric vehicles accounted for 0.27% of total vehicle sales in 2014.

Canada's new rules for coal-fired power plants are weak. They only apply to those built after 2015. Existing plants built in the last 50 years are grandfathered, meaning they will not have to take any emissions reduction measures until 2030.

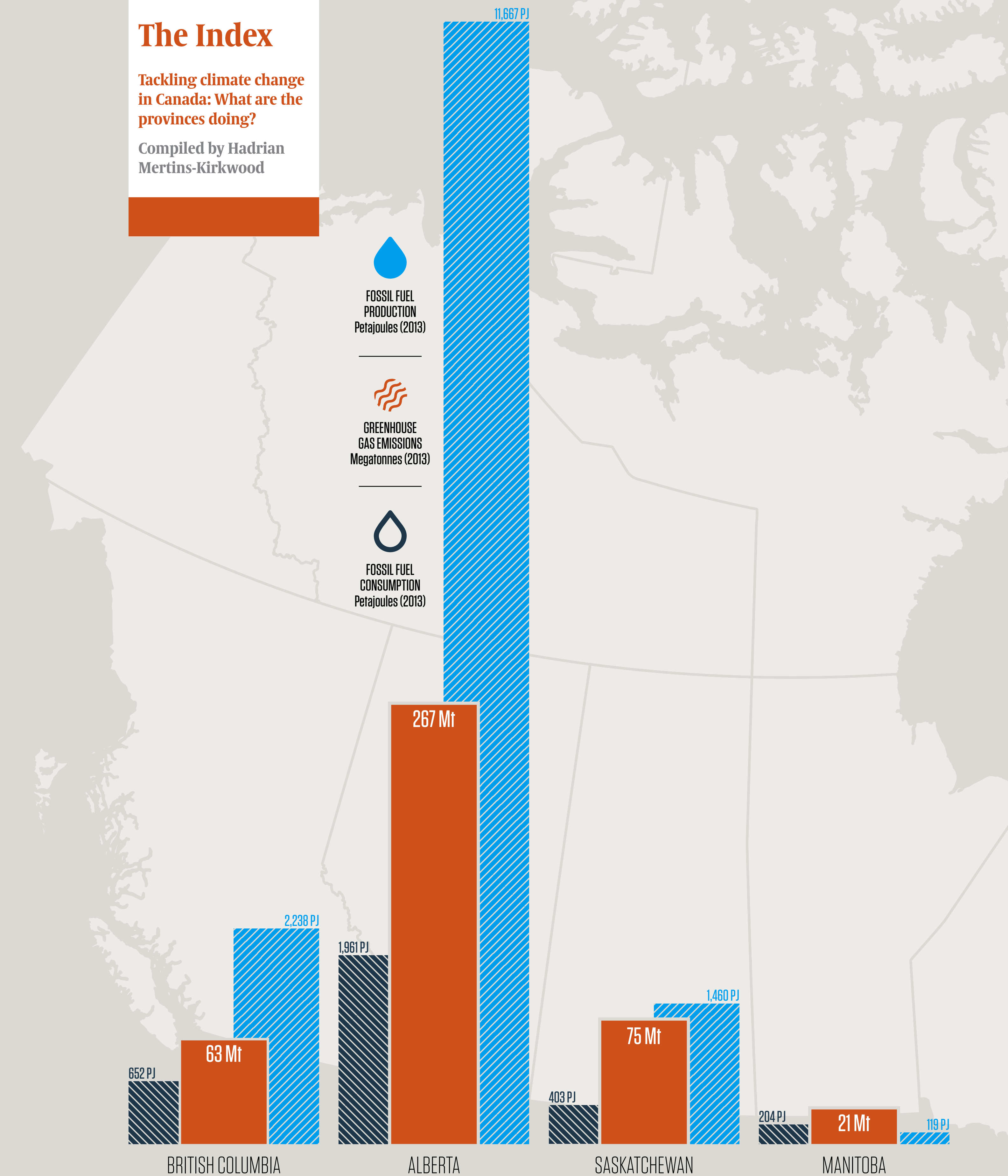
The IMF estimates total petroleum subsidies in Canada in 2011 to be $20.23 billion. Canada provides more subsidies to petroleum as a proportion of government revenue than any developed nation except the United States and Luxembourg. The IMF report estimates that eliminating the subsidies would reduce carbon emissions by 13%.

SOURCE: "HOW HAVE CANADA AND NORWAY MANAGED CLIMATE CHANGE?" BY BRUCE CAMPBELL ON THE CCPA'S BEHIND THE NUMBERS BLOG

The Index

Tackling climate change in Canada: What are the provinces doing?

Compiled by Hadrian Mertins-Kirkwood



EMISSIONS IN ALL but four provinces are lower today than they were in 1990. Stricter efficiency standards for vehicles and buildings, subsidies for renewable energy, and cleaner power production have made a measurable difference in much of the country. In Canada today, **84%** of electricity generation is non-emitting.

The provinces are veritable testing grounds for innovative climate change policies. British Columbia pioneered a revenue-neutral carbon tax, while Quebec opted to put a price on carbon through a cap-and-trade system. Net metering for small-scale renewable producers is offered across the country alongside incentives for large-scale renewable energy projects like Ontario's feed-in-tariff program. Provincial subsidy programs incentivize home retrofitting, electric vehicles, renewable energy research and other climate change action.

Importantly, almost every single province and territory has an up-to-date climate change action plan that acknowledges the necessity of reducing GHG emissions and presents a provincial mitigation and adaptation strategy.

But...

Despite reductions in most provinces, Canada's total GHG emissions are **18%** higher today than they were in 1990. We are producing and consuming more fossil fuels than ever.

The *production* of fossil fuels like oil and natural gas—i.e., just getting the sticky stuff out of the ground and processing it into gasoline and other usable fuels—accounts for **25%** of Canada's GHG emissions. The *consumption* of fossil fuels by vehicles, buildings and power plants accounts for a further **23%** of the country's total emissions.

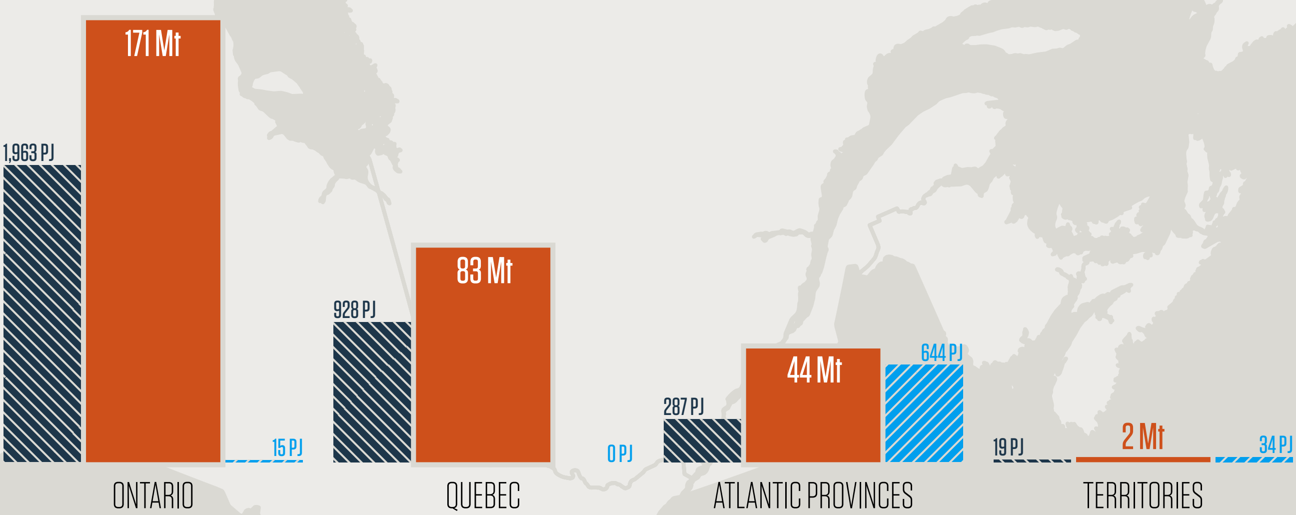
Alberta is by far the worst offender. The province produces three-quarters of the country's oil and gas and accounts for **37%** of total emissions. Saskatchewan, which has doubled down on coal-fired electricity generation, has seen the biggest increase in GHG emissions in the past two decades and is the worst per-capita GHG emitter.

But it's not just the Western resource provinces that are responsible for Canada's contribution to global climate change. Ontario consumes **31%** of the country's refined petroleum products, followed by Quebec with **20%**. These provinces might not dig up oil, but they burn more of it than anywhere else in the country.

The continued development of oil and gas in Canada is in part due to direct support from the federal government, which not only funds extractive industry research and development, but also offers massive tax breaks to oil and gas companies.

All the renewable energy production in the world won't matter if we continue to produce and consume fossil fuels at such staggering levels. Measures to improve energy efficiency and encourage alternative fuels simply do not address the root cause of the problem, which is a deep dependence on high-emitting, non-renewable dirty energy.

SOURCE: CCPA research for a forthcoming SSHRC-funded project, *Adapting Canadian Work and Workplaces to Respond to Climate Change: Canada in International Perspective (ACW).*



Canada and climate change

Marc Lee and Justin Ritchie

Divesting from fossil fuels

How pension funds are at risk from overexposure to unburnable carbon

DIVESTMENT CAMPAIGNS targeting university endowments (see sidebar), churches, foundations and pension funds have become a focus for organizing on climate change. While the motivations are primarily moral—if it is wrong to wreck the climate, it is wrong to profit from that wreckage—there are important economic arguments for divestment.

Carbon pollution, primarily caused by human use of fossil fuels, is accumulating in the atmosphere, leading to increased global temperatures and changing climate patterns. The *carbon budget* concept in climate science states there is a finite amount of fossil fuel that can be combusted before committing to dangerous levels of global warming. Recent estimates conclude that between two-thirds and four-fifths of proven fossil fuel reserves (those already near development) represent "unburnable carbon."

To illustrate the implications we developed a cost-curve ranking of future oil production around the world, from lowest to highest cost, mapped against various estimates of a global carbon budget.

In a world of constrained carbon, the lowest-cost reserves are likely to be developed first. Canada is a relatively high-cost producer, with Canadian heavy oil projects requiring a breakeven price of $70–85 per barrel (see graph). To meaningfully address climate change a large share of Canada's bitumen reserves cannot be developed.

Institutional investors including pension funds are increasingly aware that fossil-fuel company business models are not compatible with a habitable planet. But this is not reflected in the annual reports of Canadian public pension funds, which don't mention climate change as a material risk to pension sustainability.

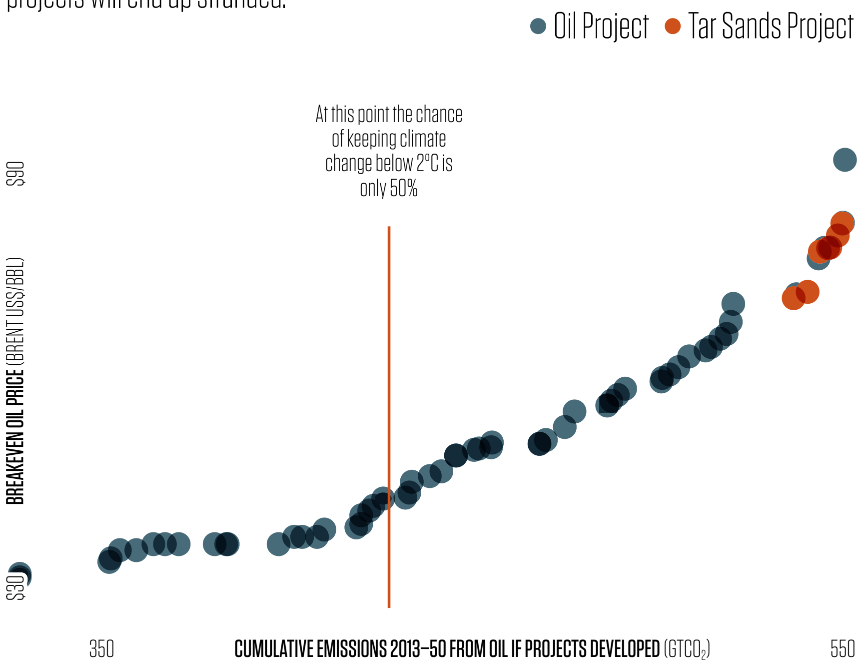
Integrating an understanding of climate policy risk that includes the potential for new regulations, carbon pricing, emission caps and unburnable carbon reserves is a logical next step in the conversation on sustainability within public sector pensions.

In addition to climate policy risk, fossil fuel holdings could become "stranded assets" for a range of reasons, including unstable commodity prices, continued innovation in renewable energy technologies, climate-related lawsuits against fossil fuel companies, and First Nations opposition to oil, gas and coal megaprojects.

Oil prices collapsed in the middle of 2014 and commodities are still generally trading at low prices. Combined with high production costs, if this continues the next phase of oil projects in Alberta's north will remain undeveloped. These dynamics are similar to the climate policy risks described above, with the key difference that an agreement to meaningfully constrain emissions would have deeper and permanent impacts on valuations.

At the same time, we see renewables continuing to be front and centre in discussions about energy. Re-

Tar sands projects are expensive. Since cheaper oil projects will likely be developed first, in order to minimize climate change higher cost tar sands projects will end up stranded.



markably, the cost of new renewable electricity generation in many parts of the world is now about the same or less than power generated from fossil fuels. Energy efficiency and conservation are also low-cost means of meeting new energy demand.

In the area of litigation, the link between carbon emissions and damages is evolving, and as Mark Carney, governor of the Bank of England, recently commented, it is possible we will soon see fossil fuel producers held liable for damages. This is similar to tobacco companies being sued for health damages resulting from use of their products. By precisely defining the statistical share of a particular company's contribution to climate change, new research has raised the possibility of assigning similar shares when damages are assessed.

Finally, we need to acknowledge that fossil fuel megaprojects face greater scrutiny than ever before. It has become the norm to ask whether a project has "social licence" to proceed. Examples include delays or rejections of pipelines, coal port expansions and liquefied natural gas terminals, with First Nations opposition playing a particularly important role due to constitutionally protected rights and title.

Fiduciary duty in a warming world

If a critical mass of the population comes to agree that getting off fossil fuels is a moral imperative, governments may be forced to regulate and cap emissions. The divestment movement therefore changes the parameters of acceptable behaviour in the financial marketplace. To the extent the movement is successful, it would reinforce all of the other risk factors mentioned here.

A warming world implies changes in the approach to fiduciary duty. While this is typically understood as maximizing returns, the key aspect of fiduciary duty is to ensure that those charged with managing funds on behalf of others do so impartially and responsibly, rather than serving their own interests.

Because of the long-term planning horizons of pension funds, intergenerational arguments (consistent with those raised by climate change) should be viewed as non-trivial. Funds must equally represent the interests of young workers for their eventual retirements. Presently, their models assume, implicitly or explicitly, an uninterrupted expansion of Canada's oil industry.

Given the important space pension funds take up in the financial system there is room for them to do more to address climate change. Divestment from fossil fuels is consistent with fiduciary duty, but funds can and should also play a transformative role in building and scaling up the green infrastructure needed for a zero-carbon world.

Infrastructure requires up-front capital investment with a return paid out over decades, which aligns well with the needs and long-term horizons of pension funds. A great deal of that money will need to come from the public sector. "Green bonds," a means of packaging certain types of infrastructure investments, raised $1.3 billion in Canada in 2014 where they were non-existent the previous year. There are equally innovative options in the private sector.

The CCPA hopes to spark a new conversation among pension fund trustees and concerned plan members, in particular in the following areas:

Disclosure: Members and trustees should press for detailed disclosure of pension fund portfolios so there is daylight on holdings.

Carbon stress testing: Faced with the risks outlined here, fund managers and trustees should be required to justify continued fossil fuel investments, clarify the risks associated with fossil fuel holdings, and develop criteria to evaluate best and worst performers.

Engagement: Pension trustees should be asking pointed questions of fossil fuel companies about their capital investment plans in light of climate science and future constraints on carbon.

Divestment and re-investment: Pension funds should develop a process for divestment and removal of high-risk companies from portfolios, minimally aimed at coal and tar sands stocks, but ideally across all sectors. This should also include a process for re-investment—shifting funds to other areas of the economy and to strategic green infrastructure investments. M

SUMMARY OF A FORTHCOMING CCPA-BC AND CLIMATE JUSTICE PROJECT REPORT BY THE AUTHORS, AVAILABLE SOON AT WWW.POLICYALTERNATIVES.CA.

Alex Hemingway

Divesting universities

IN DECEMBER, FOSSIL fuel divestment supporters at both the University of British Columbia and the University of Toronto will hear decisions from their administrations on whether the universities will stop investing in the fossil fuel industry.

University-wide votes by students and faculty at UBC overwhelmingly supported divestment, with further resolutions of support from staff unions. Over the summer, Vancouver Deputy Mayor Andrea Reimer, MLA David Eby and Juno award–winning musician (and UBC alumnus) Dan Mangan publicly backed the divestment campaign at UBC.

Jeff Rubin, former chief economist at CIBC World Markets and a University of Toronto alumnus, has also made the case for divestment at both his alma mater and UBC. The universities have not only "a moral responsibility to divest from fossil fuel companies, but a fiduciary one as well," said Rubin, author of *The Carbon Bubble*.

"The sector is already one of the worst performing sectors of the stock market and will be even more so as climate change compels the world to restrict future carbon emissions."

In September, UBC campaigners submitted new research to the university board's responsible investment committee. Fresh reports from the global consulting firm Mercer and *The Economist* magazine warn of the financial dangers of a "carbon bubble" that could deflate as international climate change regulations take shape.

Meanwhile, the global fossil fuel divestment movement continues to grow at an extraordinary rate, with divestment-committed funds ballooning to $2.6 trillion (up from $50 billion one year ago). Major universities around the world have made divestment commitments, including Stanford, Georgetown, The New School, Edinburgh, Glasgow, and Australia National University.

Universities are joined by large faith-based and philanthropic investors, professional organizations, cities and sovereign wealth funds. In Canada, divestment commitments have come most prominently from the United Church of Canada and the Canadian Medical Association.

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Daniel Cayley-Daoust

Civil disobedience as a tool for setting Canada's climate agenda

As I write this, a drawn-out electoral battle is coming to an end with a lot riding on the result. Unsurprisingly, little of substance was said about serious action on climate change during the two-month campaign, but this does not need to mean the climate movement should lower its expectations. In fact, I'm willing to propose a bold new posture for the movement in Canada: that it must focus less on reacting to an agenda driven by the political class and insist on leading the climate debate.

None of the climate plans expressed by Canada's three main parties are realistic. People in Canada are ready for a shift—a leap as some have recently framed it—which leaves the tar sands in the ground and lays the foundation for a justice-centred, community-focused, clean-energy society. The first bricks of this foundation are already being laid by forward-thinking communities. Often, they are the same communities that are fighting for their own survival.

The Lubicon Lake (Cree) First Nation, for example, has taken a leadership role on renewable energy with its Lubicon Solar project. The 80-panel installation will power a health centre in the town of Little Buffalo. Importantly, the project builds expertise within the community, allowing residents to take a step toward fossil fuel independence while also focusing on healing, as impacted communities see cancer rates and other health issues creep upward.

This transformative project in the heart of oil country signals to all levels of government that it is well past time to stop the destruction and embrace a transition to a better future. Scientists have agreed that to avoid catastrophic climate change, 85% of existing and future fossil fuel reserves need to stay in the ground, including Canada's reserves of tar sands oil. Yet Canada has dragged its feet on climate change for the last two decades, deregulated the environmental assessment process for large energy projects, and spent hundreds of millions advertising one of the world's most dirty energy sources to global investors.

While frontline communities and civil society activists have managed to block export pipelines, the tar sands have been allowed to expand rapidly to the point where they are one of the main things standing in the way of Canada achieving already inadequate climate targets set by the Harper government. The climate movement needs to take charge of the agenda.

Depending on when you read this, frontline communities, students, environmental activists and others will either be getting ready to or have since converged on Ottawa (November 5–8) for a welcoming committee of sorts for the new prime minister. Through marches, sit-ins and the giving of symbolic gifts, their goal is to set the stage for Canada's participation in the Paris climate talks at the end of November, and set the tone for climate justice activism for years to come. We aim to start an important and too long delayed conversation about Canada's climate policy.

We aim to start an important and too long delayed conversation about Canada's climate policy.

The party (or parties) elected to govern Canada after October 19 will not matter much at the end of the day, since there are limited (and obvious, if difficult) options for how we must meet our climate obligations. Though the ways we frame the issue might change, ultimately the urgency does not. The need to co-ordinate a people-driven political vision rests with the climate movement at a time when the political class continues to let us down.

The Canadian government must feel compelled to move beyond symbolic action and be part of a concrete societal shift. Strategic direct actions, by people willing to risk arrest if necessary, are an important tool for highlighting how high the stakes are; they are a legitimate means of engaging meaningfully with government.

Civil disobedience has been successful, time and again, at setting a bold justice-based agenda for policy-makers to adapt to. Just as the Keystone XL sit-ins in 2011 created the first push for an escalated and broader anti-pipeline movement over the years that followed, the prime minister's welcome in Ottawa this November will, we hope, raise the bar on the current party promises on climate action. M

The Leap Manifesto

A call for a Canada based on caring for the Earth and one another

WE START FROM **the premise that Canada is facing the deepest crisis in recent memory.**

The Truth and Reconciliation Commission has acknowledged shocking details about the violence of Canada's near past. Deepening poverty and inequality are a scar on the country's present. And Canada's record on climate change is a crime against humanity's future.

These facts are all the more jarring because they depart so dramatically from our stated values: respect for Indigenous rights, internationalism, human rights, diversity, and environmental stewardship.

Canada is not this place today—but it could be.

We could live in a country powered entirely by truly just renewable energy, woven together by accessible public transit, in which the jobs and opportunities of this transition are designed to systematically eliminate racial and gender inequality. Caring for one another and caring for the planet could be the economy's fastest growing sectors. Many more people could have higher wage jobs with fewer work hours, leaving us ample time to enjoy our loved ones and flourish in our communities.

We know that the time for this great transition is short. Climate scientists have told us that this is the decade to take decisive action to prevent catastrophic global warming. That means small steps will no longer get us where we need to go.

So we need to leap.

This leap must begin by respecting the inherent rights and title of the original caretakers of this land. Indigenous communities have been at the forefront of protecting rivers, coasts, forests and lands from out-of-control industrial activity. We can bolster this role, and reset our relationship, by fully implementing the United Nations Declaration on the Rights of Indigenous Peoples.

Moved by the treaties that form the legal basis of this country and bind us to share the land "for as long as the sun shines, the grass grows and the rivers flow," we want energy sources that will last for time immemorial and never run out or poison the land. Technological breakthroughs have brought this dream within reach. The latest research shows it is feasible for Canada to get 100% of its electricity from renewable resources within two decades; by 2050 we could have a 100% clean economy.

We demand that this shift begin now.

There is no longer an excuse for building new infrastructure projects that lock us into increased extraction decades into the future. The new iron law of energy development must be: if you wouldn't want it in your backyard, then it doesn't belong in anyone's backyard. That applies equally to oil and gas pipelines; fracking in New Brunswick, Quebec and British Columbia; increased tanker traffic off our coasts; and to Canadian-owned mining projects the world over.

The time for energy democracy has come: we believe not just in changes to our energy sources, but that wherever possible communities should collectively control these new energy systems.

As an alternative to the profit-gouging of private companies and the remote bureaucracy of some centralized state ones, we can create innovative ownership structures: democratically run, paying living wages and keeping much-needed revenue in communities. And Indigenous Peoples should be first to receive public support for their own clean energy projects. So should communities currently dealing with heavy health impacts of polluting industrial activity.

Power generated this way will not merely light our homes but redistribute wealth, deepen our democracy, strengthen our economy and start to heal the wounds that date back to this country's founding.

A leap to a non-polluting economy creates countless openings for similar multiple "wins." We want a universal program to build energy efficient homes, and retrofit existing housing, ensuring that the lowest income communities and neighbourhoods will benefit first and receive job training and opportunities that reduce poverty over the long term. We want training and other resources for workers in carbon-intensive jobs, ensuring they are fully able to take part in the clean energy economy. This transition should involve the democratic participation of workers themselves. High-speed rail powered by just renewables and affordable public transit can unite every community in this country—in place of more cars, pipelines and exploding trains that endanger and divide us.

And since we know this leap is beginning late, we need to invest in our decaying public infrastructure so that it can withstand increasingly frequent extreme weather events.

Moving to a far more localized and ecologically based agricultural system would reduce reliance on fossil fuels, capture carbon in the soil, and absorb sudden shocks in the global supply—as well as produce healthier and more affordable food for everyone.

Just a few of the Leap Manifesto initiating signatories

From left to right: Keith Stewart (Greenpeace), Seth Klein (CCPA), Ashley Callingbull (2015 Mrs. Universe), Avi Lewis (filmmaker), Tantoo Cardinal (actor), Joseph Boydon (author), David Suzuki, Melina Laboucan-Massimo (climate and tarsands campaigner, Lubicon Cree), Bishop Mark MacDonald (Anglican church National Indigenous Bishop), Maude Barlow (Council of Canadians), Sarah Harmer (musician), Clayton Ruby (lawyer), Naomi Klein (author and initiator of The Leap), Stephen Lewis, Yolen Bollo Kamara (Black Lives Matter), Paul Moist (CUPE).

We call for an end to all trade deals that interfere with our attempts to rebuild local economies, regulate corporations and stop damaging extractive projects. Rebalancing the scales of justice, we should ensure immigration status and full protection for all workers. Recognizing Canada's contributions to military conflicts and climate change—primary drivers of the global refugee crisis—we must welcome refugees and migrants seeking safety and a better life.

Shifting to an economy in balance with the earth's limits also means expanding the sectors of our economy that are already low carbon: caregiving, teaching, social work, the arts and public-interest media. Following on Quebec's lead, a national childcare program is long past due. All this work, much of it performed by women, is the glue that builds humane, resilient communities—and we will need our communities to be as strong as possible in the face of the rocky future we have already locked in.

Since so much of the labour of caretaking—whether of people or the planet—is currently unpaid, we call for a vigorous debate about the introduction of a universal basic annual income. Pioneered in Manitoba in the 1970s, this sturdy safety net could help ensure that no one is forced to take work that threatens their children's tomorrow, just to feed those children today.

We declare that "austerity"—which has systematically attacked low-carbon sectors like education and health care, while starving public transit and forcing reckless energy privatizations—is a fossilized form of thinking that has become a threat to life on earth.

The money we need to pay for this great transformation is available—we just need the right policies to release it. Like an end to fossil fuel subsidies. Financial transaction taxes. Increased resource royalties. Higher income taxes on corporations and wealthy people. A progressive carbon tax. Cuts to military spending. All of these are based on a simple "polluter pays" principle and hold enormous promise.

One thing is clear: public scarcity in times of unprecedented private wealth is a manufactured crisis, designed to extinguish our dreams before they have a chance to be born.

Those dreams go well beyond this document. We call for town hall meetings across the country where residents can gather to democratically define what a genuine leap to the next economy means in their communities.

Inevitably, this bottom-up revival will lead to a renewal of democracy at every level of government, working swiftly toward a system in which every vote counts and corporate money is removed from political campaigns.

This is a great deal to take on all at once, but such are the times in which we live.

The drop in oil prices has temporarily relieved the pressure to dig up fossil fuels as rapidly as high-risk technologies will allow. This pause in frenetic expansion should not be viewed as a crisis, but as a gift.

It has given us a rare moment to look at what we have become—and decide to change.

And so we call on all those seeking political office to seize this opportunity and embrace the urgent need for transformation. This is our sacred duty to those this country harmed in the past, to those suffering needlessly in the present, and to all who have a right to a bright and safe future.

Now is the time for boldness.

Now is the time to leap. M

THE WRITING OF THE LEAP MANIFESTO WAS INITIATED IN THE SPRING OF 2015 AT A TWO-DAY MEETING IN TORONTO ATTENDED BY REPRESENTATIVES FROM CANADA'S INDIGENOUS RIGHTS, SOCIAL AND FOOD JUSTICE, ENVIRONMENTAL, FAITH-BASED AND LABOUR MOVEMENTS. YOU CAN SIGN THE MANIFESTO AT LEAPMANIFESTO.ORG.

Canada and climate change

Bruce Campbell, Seth Klein and Marc Lee

How can we afford the leap?

THERE ARE MANY who will read *The Leap Manifesto* and find the goals worthy and exciting, but who will legitimately wonder whether such a plan is really affordable and realizable. The answer, in short, is yes. We can afford to make this leap. All that is lacking is the political will and determination.

First, much of what *The Leap* calls for is infrastructure (public transit, high-speed rail, renewable energy, carbon-zero buildings, etc.), and traditionally we finance such capital expenditures through debt spending (the selling of government bonds). Infrastructure is rightly understood as an investment, so it makes sense to amortize the cost over many years.

Much of what is envisioned consists of shifting new infrastructure spending away from traditional projects (roads, bridges, and port and energy infrastructure designed to facilitate the extraction and export of fossil fuels) and toward the green infrastructure we now need. It also means investing in our social infrastructure—health care, education, social housing, and child care—with their associated low-carbon jobs.

Resource royalties across Canada are in urgent need of review, and many should be raised considerably. What our provincial governments currently charge in forestry stumpage fees, natural gas and oil royalties, and for industrial water usage is often deplorably low. Setting appropriate royalty rates could raise much needed new revenues for provincial governments and First Nations (on whose territories much of this extraction occurs), helping to finance the transition envisioned by *The Leap*. In particular, higher resource royalties can and should be allocated to provincial and federal sovereign wealth funds for the benefit of current and future generations, as Norway has done with great success (see Gordon Laxer in this issue).

As for many of the other revenue options proposed above, the Alternative Federal Budget (AFB) produced each year by the CCPA outlines how many of these taxes (and others) will make paying for *The Leap* quite simple. Here are but a few of the options from the AFB:

- Ending subsidies to the fossil fuel industry would recoup about $350 million a year for the federal government (and more if provincial governments do likewise).
- A national financial transaction tax could raise $5 billion a year.
- Ending special tax treatment for capital gains income would recoup $7.5 billion a year (and more for provincial governments).
- Returning the corporate tax rate to where it was in 2006 would raise $6 billion a year.
- Tackling tax havens would recoup $2 billion a year.
- A new federal tax bracket on incomes over $250,000 could raise about $3.5 billion a year.
- Scaling military spending back to pre-9/11 levels would save $1–$1.5 billion a year.
- Eliminating income splitting and other ineffective recent tax cuts for families with children would recoup $7 billion a year.
- And a national carbon tax of a mere $30 per tonne would raise $16 billion a year.

The carbon tax option deserves special attention, given its unique potential in facilitating *The Leap* by driving new green investment by the public and private sectors. We would argue that, over time, the tax should be higher than $30 per tonne. Marc Lee, in his CCPA Climate Justice Project report *Fair and Effective Carbon Pricing*, has modelled a B.C. carbon tax that rises incrementally to $200 a tonne. At this level, the tax would truly impact the consumption and investment choices of households and business, helping to significantly reduce greenhouse gas emissions. It would also raise about $8 billion a year in B.C. alone.

Lee proposes that half this income be used to fund climate action and green infrastructure (public transit, building retrofits, etc.), as well as "just transition" programs for workers currently employed in the fossil fuel sector, and half be used for a carbon tax credit for low- and middle-income households. Such a credit would mean the bottom half of households would be better off on net—they would receive more in the credit than they pay in the higher carbon tax—thus improving the progressivity and fairness of the overall tax system. A national carbon tax at $200 a tonne would raise approximately $80 billion a year.

When Canada entered the First and Second World Wars, our economy had to be entirely retooled for a new common purpose: scarce resources were deployed for the task at hand, Victory Bonds were sold, new taxes were levied, household consumption shifted, core industries were directed to produce the goods and services needed, and in the process employment grew dramatically.

Is the climate crisis we face today really all that different? M

Supporter Profile
Marcia Almey

I was brought up in an atmosphere imbued with idealistic Jewish values like the need for greater social and economic equality, respect and even reverence for knowledge and learning, and the rabbinical injunction "Tikkun olam," to make the world a better place. Neither of my parents had access to higher education, but they were avid readers and devoted listeners to the CBC—habits I happily inherited. My mother was very intelligent. The way she explained the social and economic forces at work in the world made historical events come alive. I well recall her saying to me many times, "From each according to his ability, to each according to his need."

I would eventually join the federal public service, working mainly at Statistics Canada until I retired in 2008. I particularly enjoyed my work there on a number of aspects of the census, including communications, consultations for the 1991 survey, and later analyzing census data. In the last years of my career, I worked in the Target Groups Project, which produced reports on groups of specific social policy interest: women, seniors, visible minorities, Aboriginal peoples, the family and youth. One of the great joys of this work, and its most revealing aspect, was working with time series data—taking a closer look at census or Labour Force Survey results to see how a topic of interest or social group has evolved over time. The results vividly illustrated the demographics of the population, the decline in family size and increasing participation of married women and mothers in the labour force, the increasing educational attainment of women, and many other trends. Sadly, with the cancellation of the long-form census, these kinds of important and illuminating data are no longer available.

I bought a house in the 1990s, when interest rates were much higher than they are now, but worked very hard to pay down the debt. With the mortgage paid off, I realized I had much more disposable income, so I decided to give some financial support to organizations I had until then only verbally supported. My first cheque went to the Council of Canadians. Not long afterwards, I received a letter from the CCPA seeking donations and support.

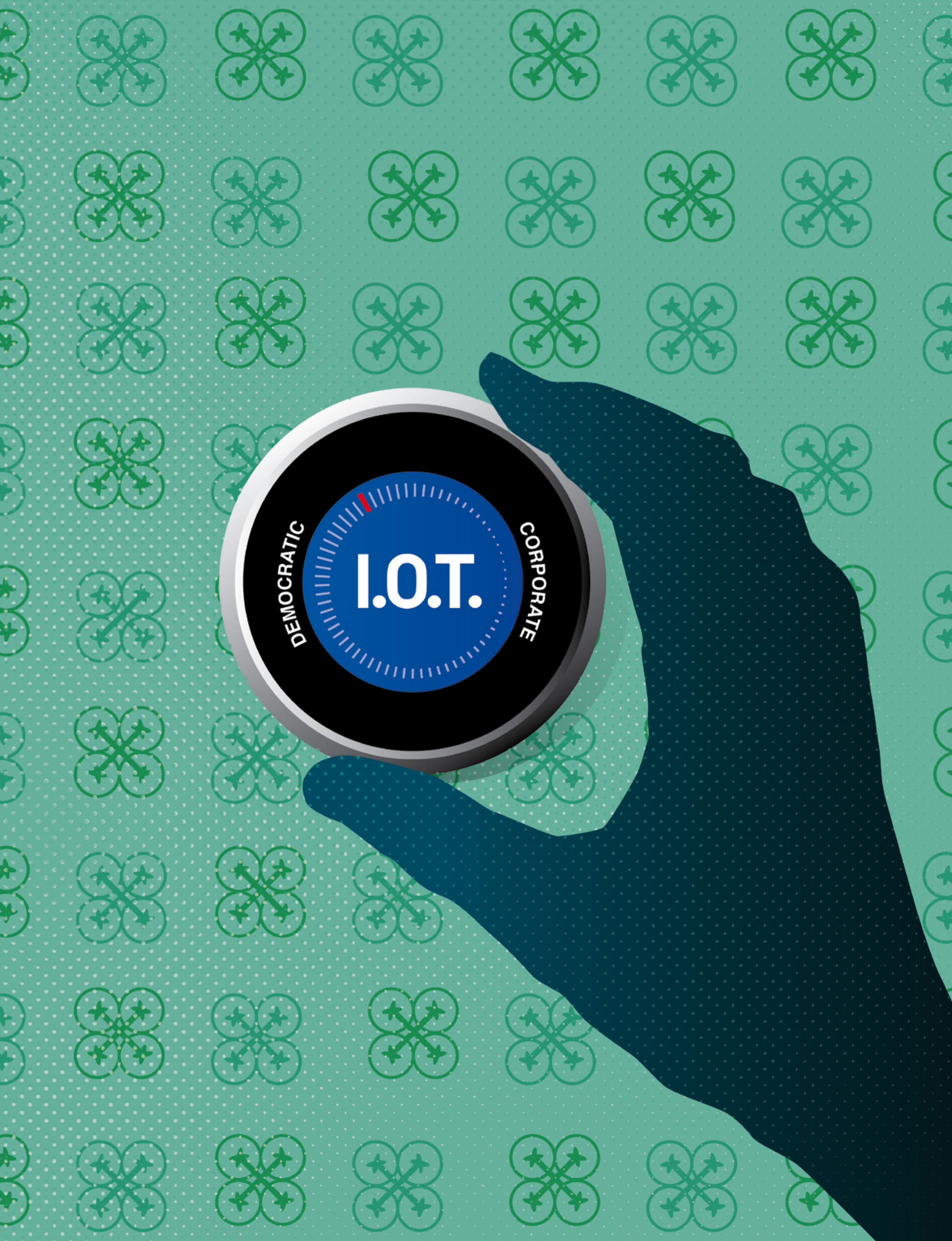
At that time, all I knew about the CCPA was its Alternative Federal Budget, which I had heard discussed on CBC radio. When I read the letter, though, I saw that the CCPA was working for the same progressive goals and values that I was brought up with. I sent them a cheque and have since become a monthly supporter. I am now in the process of revising my will so that it will include a legacy gift for the CCPA, since I think it's important that we continue to work for a more progressive, fair and egalitarian Canada.

My vision of Canada includes a strengthened social safety net, secure retirement for all seniors, expanded and well-funded universal health care that includes pharmacare, increased access to higher education, door-to-door mail delivery, a restored and strengthened CBC (with Radio Two returned to its former glory), restored and expanded public services, greater respect for Aboriginal peoples and their treaty rights, and a greater role as peacekeepers at the UN. Finally, I would hope to see Canada take a leadership role in fighting climate change.

It seems to me that the peer-reviewed research done by the CCPA can play a vital role in this transformation. It can also bring to the attention of lawmakers the policies and ideas that have worked in other countries and why—so that we might reproduce their successes in Canada. The CCPA can play an important role in making this country a much better place to live for this generation and all to come after.

CCPA
CANADIAN CENTRE for POLICY ALTERNATIVES
CENTRE CANADIEN de POLITIQUES ALTERNATIVES

The CCPA is grateful to those who have arranged a legacy gift or are considering this in the future. We would appreciate the chance to thank you or provide information—please contact Katie Loftus, Development Officer, at 1-613-563-1341 ext. 318 or katie@policyalternatives.ca.


DEMOCRATIC
I.O.T.
CORPORATE

STORY BY VINCENT MOSCO, ILLUSTRATION BY AMY THOMPSON

CAN THE **INTERNET OF THINGS** BE DEMOCRATIZED?

THE IMPACT OF THE NEXT INTERNET ON PRIVACY, JOBS AND THE ENVIRONMENT

ON MARCH 12, 2014, Google called on the world to celebrate the 25th anniversary of the Internet, which was born, in the company's view, when the first web browser was released to the public. Although the earliest Internet communication dated back to 1969, only those few with advanced technical skills could use it. With the arrival of graphical browsers, the Internet was opened to all of us, and Google, with help from early government investment, took off to become one of the richest corporations in the world. By 1993, the Internet was so widespread *The New Yorker* could publish a cartoon—it remains the magazine's most viewed—featuring a dog sitting in front of a computer screen, explaining to a fellow canine next to him, "On the Internet, nobody knows you're a dog."

Even as the celebrations of the Internet's adulthood were taking place, the so-called Next Internet was emerging from its infancy. Google acknowledged this when, in a revealing 2015 interview, Amit Singhal, a senior vice-president at the company, declared that its search engine—the innovation that catapulted Google into the global business elite—was now a "legacy" system, a euphemism for "still useful but destined for the trash heap." The future for Google, other large firms and Next Internet startups alike, will be in the development of new forms of mobile-friendly search engines appropriate to the new ways we are using the Internet, said the executive.

It would be presumptuous to map out the precise composition of this next stage in the digital world, but one can conclude with some confidence that whatever the Next Internet becomes, it will likely dwarf its older sibling in the power to influence every facet of life, as well its potential to wreak havoc. So far, the Next Internet still bears some of the characteristics of the one born in 1989. But it is taking off rapidly and already challenging many of the characteristics associated with the original Internet, particularly its founders' vision of a democratic, decentralized and pluralistic digital world.

Big data, the cloud, and the Internet of Things

THE NEXT INTERNET brings together three major systems: cloud computing, big data analytics, and the Internet of Things. Combined, these systems promise companies and government agencies centralized data storage and services in vast digital factories that process and analyze massive streams of information gathered by networked sensors stored in every possible consumer, industrial and office device. The New Internet therefore establishes a very different set of standards that make the problems we have associated with the first Internet look comparatively minor. The environmental, privacy and labour challenges alone are monumental.

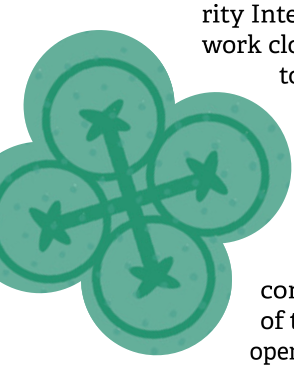
The original Internet was a set of networks that provided users with the software to locate information on millions of servers located all over the world and to connect with others through these server-based networks. It was decentralized to the extent that the computer servers anchoring the system were both large and small, public and private, and managed in a myriad of ways. The brilliance of the Internet was figuring out how to get this decentralized, distributed world of servers to talk to each other and users through a simple, universal software standard.

This structure began to change fundamentally with the growth of cloud computing, the first building block of the Next Internet. The cloud is a system for storing, processing and distributing data, applications and software using remote computers that provide on-demand IT services for a fee. Familiar examples include Google's Gmail, the online storage company Dropbox, and Microsoft Office, which increasingly distributes its widely used word processing and business software online for a monthly fee.

The cloud enables businesses, government agencies and individuals to move their data from on-site IT departments and personal computers to large data centres located all over the world. This imperative to free up storage space opens a rapidly growing business for companies that profit from storage fees, from the services provided online, and from the sale of customer data to companies interested in marketing products and services or simply storing it until it becomes a valuable asset in a merger/acquisition deal.

What happens next to all of this valuable information remains literally and figuratively up in the air.

Government surveillance agencies like the U.S. National Security Agency (NSA) and Canadian Security Intelligence Service (CSIS) also work closely with cloud companies to meet their security and intelligence needs. The diverse collection of servers providing the foundation for the original Internet has evolved into a global system of data centres, each containing tens or hundreds of thousands of linked servers, operated primarily by private corporations and government military and surveillance authorities.



The leading science journal *Nature* made very clear the practical difference between the original Internet and one based in the cloud when it called on the U.S. government to establish a "Cloud Commons" for biological research, especially in genomics. It did so because research on large data sets is far easier and faster to carry out in the cloud than through servers based in university research facilities (a difference in project time alone of between six weeks for the cloud and six months for the old Internet).

Sparked by this research potential, and even more so by a massive advertising campaign to encourage individuals and organizations to move "to the cloud" (including high-priced ads during the 2011 Super Bowl), the idea of cloud computing is now familiar to most Internet users. You could say that if the *New Yorker*'s dog cartoon gave birth to the first Internet then the Next Internet began with the magazine's 2012 ad featuring a sad-looking boy explaining to his teacher how "The cloud ate my homework."

The cloud embodies the massive outsourcing of computing and related services like sales, accounting, customer relations, finance and legal matters to the companies that own and manage data centres. It marks a major step toward creating a centralized, globalized and fully commercial Internet.

The major cloud providers are almost all large corporations including familiar names like Amazon, the world's largest cloud business, Microsoft, IBM and Google. Through service contracts, most of these are well integrated into the military, intelligence, and surveillance arms of government. Amazon, for example, provides cloud computing storage and services for both the Central Intelligence Agency (CIA) and the NSA. Meanwhile, government agencies demanding heightened levels of security are building their own cloud facilities: in 2015, the NSA opened one of the world's largest in a secure mountain location in Utah.

Cloud centres are global factories working on the raw materials of data to yield digital products (e.g., user profiles) and services that generate new data. In addition to the value of rationalizing and outsourcing corporate and government operations, supporters of the cloud point to the growing power of big data analytics to make the cloud even more attractive. This second leg of the Next Internet is made up of the tools used to analyze, package and sell data stored in the cloud.

In spite of the proliferation of fancy new titles that fuel enthusiasm for big data—data science professional is a favourite—there is very little that a social scientist would find especially novel. The process involves taking a large (often massive), almost always quantitative data set and examining the specific ways the data do or do not cohere or correlate in order to draw conclusions about current behavior and attitudes, and to make predictions.

Facebook, for example, takes the data generated by its 1.3 billion users and relates the "likes" associated with posts about celebrities, companies and politicians to views about society or commercial products (and, of course, cats). These enable the company to develop profiles on its subscribers that are then sold to marketers who are able to target Facebook users with customized ads sent to their Facebook pages. Google does the same for search topics as well as for the content of Gmail, and Amazon creates profiles of its users based on searches and purchases on its site.

Given the limitations of quantitative correlational analysis, especially the absence of history, theory, and subjectivity (qualitative data is ignored or poorly translated into numbers), we should hardly be surprised by big data's failures; for example, on such projects as seasonal flu predictions and building models for economic development. These failures are mounting as quickly as the opportunities to manipulate online data for profit. Nevertheless, for simpler problems such as determining the likes and dislikes of every conceivable demographic cohort, the massively large stores of data available for analysis in the digital factories that make up the cloud offer major incentives for companies and governments to invest in both cloud data centres and big data analysis.

The Internet of everything

THE CLOUD AND big data are enhanced substantially by the growth of what is called the Internet of Things (IOT). From watches that monitor blood pressure to refrigerators that tell you to order more milk, from assembly lines "manned" by robots to drones that deliver what robots produce, the IOT promises a profound impact on individuals and society.

The IOT refers to a system that installs scanning and processing devices in everyday objects and production tools, connecting them in networks that gather and use data on their performance. We refer to the admittedly awkward term Internet of Things because, unlike the Internet we know, which connects people, the IOT primarily links objects. The sensors in a refrigerator form a network of things that report on what's inside and how it is used. The IOT is made possible by advances in our ability to miniaturize scanning devices and provide them with sufficient processing power to permit the ability to monitor activity, analyze usage and deliver the results over electronic networks.

A 2015 report from the private think-tank McKinsey concluded that, by 2025, the IOT will have an economic impact of between US$3.9 and US$11.1 trillion ($5.1 and $14.6 trillion), which, at the high end, is over 10% of the world economy. Even discounting for the hyperbole that often accompanies tech forecasts by research organizations that are looking to drum up business from the industries they examine, the report is interesting in highlighting the likely impacts and identifying the organizations most likely to be affected.

Interestingly, according to McKinsey, the manufacturing sector leads the way for IOT as robotics and overall surveillance of operations enables more tightly managed and efficient factories and global supply chains. But these will also extend to offices, retail operations, the management of cities, and overall transportation as automated vehicles take to the streets and highways. Heightened monitoring will also take place in the home, with promises of greater control over heating and cooling, ordering food and supplies, and to the body as well, where sensors will continuously monitor fitness and body functions like blood pressure, heart rate and the performance of vital organs.

This sounds futuristic. And depending on your point of view either dystopian or utopian. But it speaks to the potential power of the new technology and to the fundamental differences between the original Internet and its successor.

Companies have been quick to take advantage of their leading positions in the digital world to rush into the IOT. Prime examples include Google's research on the driverless car, the Apple Watch, and Amazon's embrace of robotics in its warehouses to speed the work of order fulfillment, the use of drones for delivery, and new forms of packaging, including installing pushbuttons on products that automate the ordering of refills. The IOT has also given new life to an old industrial firm, General Electric, which was remade in the 1990s by shifting from manufacturing to finance. GE has now all but abandoned the increasingly regulated world of banking only to emerge as a dominant player producing devices essential to the IOT and making use of them in its own industrial processes.

Along with the benefits to corporations, the IOT holds out great promise for the military. In fact one reason why the Pentagon's Defense Advanced Research Projects Agency (DARPA) is so keen to develop IOT is because it greatly strengthens opportunities to automate warfare through robotics and drone weaponry in addition to enhancing overall control over troops.

One enormously valuable result of monitoring every device and connecting them in a global grid of objects is the exponential growth in commercially useful data. Today, according to a Cisco report, only 1% of the world's objects are linked, so the big promise of the IOT remains just that—a promise, yet to be filled. Nevertheless, it is forecast that by 2020, 50 billion connected devices will join the Next Internet, gathering and reporting data all the time. Massive new data sets will require both massive new cloud data centres and widespread use of data analysis to succeed.

"Currently, most IOT data are not used," says McKinsey. "For example, on an oil rig that has 30,000 sensors, only 1% of the data are examined. That's because this information is used mostly to detect and control anomalies—not for optimization and prediction, which provide the greatest value."

How to use this data, internally and as a marketable commodity, is one of the biggest challenges facing the IOT industry.

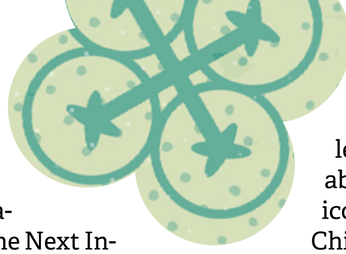
The corporate-military-data complex

MOST OF WHAT is written about the Next Internet is technical or promotional, emphasizing the engineering required to build it or touting its potential in sometimes accurate, sometimes dreamily hyperbolic terms, from creating a world of nonstop leisure to ending capitalism as we know it. We are just beginning to see some discussion of the serious policy issues that arise in a world of massive data centres, constant analysis of human behavior and the performance of objects, and ubiquitous connectivity. These include the concentration of power over the Next Internet in a handful of mainly U.S. companies and the military-intelligence apparatus, the environmental consequences of building and maintaining massive data centres and powering systems, threats to privacy and security, and the impact of automated systems on human labour.

A handful of familiar American companies, currently led by Amazon, dominate the Next Internet. The company was among the first to build a one-size-fits-all cloud service that attracted individuals and organizations (including Netflix) with its simplicity and discount prices, which dropped even further when Google and Microsoft began to challenge the online retailer's frontrunner status. Indeed some have claimed that Amazon and its competitors have engaged in the not-so-fine art of predatory pricing by charging below cost for cloud services and compensating with above-market prices in other businesses where they enjoy market power.

Facebook and Apple round out the list of firms that used their power in social media, software and hardware in the original Internet to become leaders in the Next Internet. Legacy companies like IBM, Oracle, HP and Cisco have scrambled to replace their expertise in servicing (now disappearing) IT departments and pivot to the new digital world. However, the need to cannibalize old systems and remake their organizations has made the going slow.

In addition, there are firms that specialize in one or another of the constituent Next Internet systems, such as Rackspace and Salesforce.com, but these are constantly un-



dermined by encroachment from the dominant companies. A wildcard in the Next Internet arena is General Electric, which is betting heavily on reinventing factories with IOT systems.

Two things stand out in the early configuration of the Next Internet industry. First, it is already highly concentrated and, as we've seen, dominated by American firms. Historians of technology will recognize the similarity of this pattern to the early days of electrification, telegraphy, telephony and broadcasting. In each of these industries, regulation and outright state ownership were required to control abuses and increase access at affordable rates. However, these remedies are less likely to be applied in a world where regulation and government ownership are no longer in favour.

A second feature, also mentioned briefly, is how dominant firms are benefitting from their close ties to the military and intelligence communities, providing them with Next Internet services and co-operating more often than not with government requests for information on users. In fact, close ties to the Pentagon, including its well-funded research arm DARPA, the NSA, and the CIA helps to explain why there are no challengers to U.S. hegemony over the Next Internet coming from Europe, whose telecommunications companies once led the world.

As for Canada, the government's decision to build an oil-based economy and diminish support for technology and science-based investment means that the country has no successors to the once powerful Nortel or the pioneering Blackberry. Canadian companies do little more than fill small niches in the new systems that make up the Next Internet.

The only serious challenge to U.S. domination comes from China where the government has invested heavily in Next Internet technologies and made them a part of its overall policy and planning. This has benefited leading companies like Alibaba, Baidu, Huawei and Tencent, among others. Signalling its intent to challenge America's lead, Alibaba has set up shop in Silicon Valley and, like other Chinese firms, is building on the enormous domestic market to extend its reach internationally.

While the prospects for China's success are uncertain, it is interesting to observe that it is the only formidable force in the world standing between Silicon Valley's giants and complete domination over the Next Internet. A look at the remaining policy issues reveals why this is so important and why it is essential that societies begin to consider the need for public intervention.

The still material world

BECAUSE THE DIGITAL world is made up of invisible electrons zipping through the air, there is a tendency to see it as immaterial. Nothing could be further from the truth and the sooner this is recognized the more likely the environmental problems associated with the Next Internet will be addressed. Some of these problems are specifically related to the cloud and others are of more general concern. Cloud data centres are hardly immaterial structures and, as they come to fill the world, there are numerous emerging environmental policy issues.

First, there are question of siting and building data centres. Cloud companies typically locate outside urban areas and demand relief from property taxes. Because they are energy hogs, they also look for discounts on electricity. Their lobbying and bargaining power, especially with the local governments that often handle such issues, have contributed to their success. Breaks on energy charges are especially significant because the thousands of servers in cloud centres make enormous demands on electricity grids for power and cooling.

Moreover, cloud data centres often require relief from environmental controls because customer demand for nonstop service requires several layers of backup power that are often polluting (primary backup uses diesel generators) and sometimes carcinogenic. Many data centres require large, continuous supplies of water for their cooling systems and this requirement alone raises serious policy issues in places like the western United States where years of drought have taken their toll.

Some companies have responded to opposition from environmental groups, especially Greenpeace, by incorporating solar and other sustainable forms of power into their data centre power supplies. But as power requirements grow beyond the 3% of the global supply they now consume, systematic regulation is required, including a broad review of discount power deals.

Notwithstanding any progress in this area, the primary source of power consumption in the Next Internet lies elsewhere—in the sensors embedded in what is expected to be billions of connected devices, and the communication systems that connect people and things through cellular and other wireless networks.

A world of ubiquitous, always-on connected devices has energy companies salivating, especially the lobbying arm of the coal industry, which sees the Next Internet as an opportunity to build on what a study for the U.S. National Academy of Sciences calls "the renaissance of coal." As one industry-sponsored report concluded, "The inherent nature of the mobile Internet, a key feature of the emergent cloud architecture, requires far more energy than do wired networks.... Trends now promise faster, not slower, growth in ICT energy use."

By the standards anticipated in a digital world where the IOT is fully developed, today's Internet is far from creating a connected world, let alone the singularity that fills the dreams of Internet enthusiasts. Only about 40% of the world's population now has access and, as one might expect, it is concentrated in the developed world and in urban centres. And as mentioned already, we are even further away from the promise of ubiquitous links among objects with only 1% connectivity.

But even at this relatively low level, technical problems and criminal hacking plague the system. On one day in 2015, the entire U.S. fleet of United Airlines was grounded, the New York Stock Exchange shut down for several hours, and the *Wall Street Journal*'s computers stopped operating. All of these were explained as a result of technical "glitches."

Just as this calamity hit the news, the U.S. government reported that hackers had stolen the personnel records of 22.1 million people including federal employees, contractors, and their families and friends who provided information for background checks. The haul also included 5.6 million sets of fingerprints.

Even with the current limited state of connectivity, similar incidents are a regular feature of the emerging Next Internet and even supporters worry that security issues may slow its development. Privacy and security concerns rise exponentially as greater connectivity increases opportunities for technical breakdowns and criminal hacking. One tech journalist referred to the IOT as "the greatest mass surveillance infrastructure ever."

The all-seeing CEO and surveillance state

NOTWITHSTANDING NEW HACKING opportunities, the most significant threats from the Next Internet arise from data-hungry businesses and governments. After all, the greatest attraction of ubiquitous computing is in the data collected on the behavior of people and the performance of objects. These offer opportunities for an enormous expansion in both surveillance capitalism and the surveillance state, with businesses refining targeted advertising and product development well beyond the crude systems that even today's Internet makes possible, and governments deepening tracking and control of citizen behavior and attitudes.

Consider the commercial benefits to insurance companies that will be able to continuously monitor the health of customers, their driving habits and the state of their homes; or to governments that can adjust benefits and other services based on citizen behavior registered in their actions, as well as their interactions with one another, and with the things that fill their lives.

As GE's sensor-equipped light bulb demonstrates, individual CCTV cameras will fade in significance as any basic device scanning public and private places has the potential to become a surveillance tool. Discussions of anticipatory selling, as well as anticipatory policing (euphemistically called "predictive analytics") are worrisome to privacy advocates because they are attracting great interest from businesses and governments.

The impact of the Next Internet on jobs and the nature of labour is also an important policy issue. At first glance, it is tempting to think "here we go again," since the impact of technology has been discussed for many years, but especially since the end of the Second World War, when the computer scientist Norbert Wiener generated considerable public debate by raising the spectre of massive job loss due to automation.

The Next Internet is creating and will likely continue to create jobs, including traditional construction jobs in the building of global networks of data centres. The new profession of data science—those trained in the analysis of large data sets—will grow. And the industry will need people skilled in the control, maintenance, and monitoring of networked things, though it is important to approach the impact of computer technology on jobs and the economy with caution. As Doug Henwood's research documents, overall employment is much more closely connected to GDP than it is to computerization and, except for the late 1990s, when there was massive investment in hardware, the long-promised productivity gains from investment in IT have failed to materialize.

However, it appears very likely that this time around there are far more opportunities for the Next Internet to eliminate human labour, including professional knowledge work. In fact, one expert consultant prefers to define cloud computing as "nothing more than the next step in outsourcing your IT operations." This is in keeping with a general tendency, which one researcher for the major consulting firm Gartner Associates summarizes succinctly: "The long run value proposition of IT is not to support the human workforce—it is to replace it."

The Next Internet creates immediate opportunities for companies to rationalize their information technology operations. Again, from Gartner, "CIOs believe that their data centres, servers, desktop and business applications are grossly inefficient and must be rationalized over the next ten years. We believe that the people associated with these inefficient assets will also be rationalized in significant numbers along the way."

Next Internet companies maintain that their systems can break a pattern in business organizations that began when the first large computers entered the workplace. Almost all business and government agencies insisted that it was essential to operate their own IT departments and, for the larger organizations, their own data centres. Next Internet supporters insist a few large data centres can meet this demand at lower cost with far fewer professional personnel. This process has already begun and early studies demonstrate that, even with limited downsizing of IT departments, companies are saving between 15% and 20% of their IT budgets.

The Next Internet also makes possible the widespread rationalization of all knowledge and creative labour because the work of these occupations increasingly involves the production, processing and distribution of information. According to one observer, "In the next 40 years, analytics systems will replace much of what the knowl-

edge worker does today." A 2013 report concluded that 47% of the current U.S. workforce is directly threatened and in the high-risk category for job loss.

Whatever the precise share under threat, there is no doubt that the current trend is to move an increasing portion of the work that knowledge workers perform to machine systems, specifically through software that can carry out tasks that once required human intelligence. Analytical systems at the core of the Next Internet are taking prominence in education, health care, the law, accounting, finance, sales and the media. Thanks to the Next Internet, both private and public sector organizations are encouraged to outsource all but their core business processes to companies like Salesforce.com, which specializes in managing vast databases of customer information, a function that traditional marketing and client service departments within organizations typically performed.

Flexible labour at the breaking point

THE EXPANSION OF outsourcing to computers raises serious questions for the entire global system of flexible production. According to Gartner, "That outcome will hit all economies—especially emerging ones like India that now dominate technology outsourcing." It may be an overstatement to declare, as did *Forbes* magazine, "We are all outsourcers now," but it certainly makes feasible more kinds of outsourcing: "Outsourcing is no longer simply defined by multi-million-dollar mega-deals in which IT department operations are turned over to a third party. Rather, bits and pieces of a lot of smaller things are gradually being turned over to outside entities."

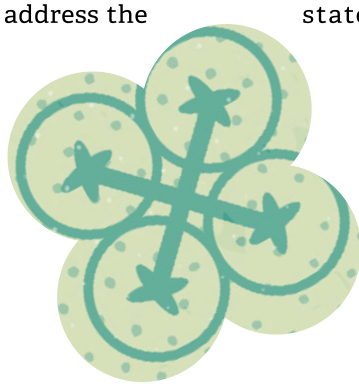
Amazon is a leading force in this process with its Mechanical Turk business that charges individuals and organizations who wish to outsource micro-tasks to a worldwide reserve army of online piece workers. Combined with the promise of product warehouses full of robots to locate, pack and ship goods, and drones to deliver them, Amazon is the leading edge of the Next Internet's push to expand labour commodification throughout the world. Reports on the Next Internet are full of talk about the opportunities to radically reorganize and manage global supply chains.

What can be done to address these problems? First and foremost, it is essential to view them as intrinsically social and not merely technological in nature. The dream of ending capitalism with technology remains a fantasy. While technology plays a role in addressing serious policy issues, there is no simple digital fix to solve them. It will take concerted political action to break up the concentrated corporate power that is now making the Next Internet primarily a tool for profit.

It will also take global social movements, stronger versions than those that called for a New World Information and Communication Order in the 1970s and '80s, to build a digital commons for the 21st century. Furthermore, there is great need for social policies that make protecting the environment and sustainability central to all decision-making about the Next Internet.

We also require social policies that recognize privacy as the human right of access to the psychological space essential to developing individual autonomy. This means that privacy is an essential right of citizenship and not a tradable commodity. Protection of that space from commercial and government surveillance must be central to the choices made about the Next Internet.

Finally, we need social policies about employment and income that address the state of human labour in an age when automation threatens jobs, including now those of the white-collar workforce. Does this mean we should reopen the discussion of a guaranteed annual income? What is the right balance of such a policy with job creation? How can we facilitate organizing digital workers who tend to be employed in the "gig" economy of precarious jobs? Is the union at Gawker—a pioneering web-publishing success story—a good model for the future?



The digital world is at a critical juncture represented by two clashing visions. The first imagines a democratic world where information is fully accessible to all citizens as an essential service. In this world information is managed through forms of regulation and control that are governed by representative institutions whose goal is the fullest possible access and control for the greatest number of citizens. Governance might take multiple forms, including different combinations of centralized and decentralized approaches at local, regional, national and international levels.

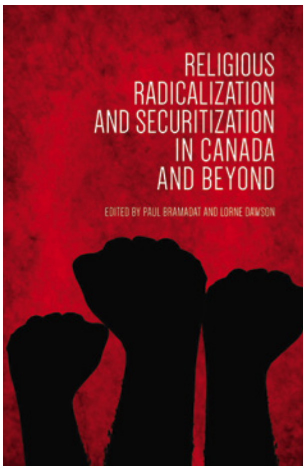
The second vision imagines a world controlled by global corporations and the surveillance and intelligence arms of national governments. Under this model, the market is the leading force shaping decisions about the production, distribution and exchange of information, and corporations with market power hold the most influence. In this fundamentally undemocratic world, digital behemoths share power with governments who make full use of digital technologies for surveillance, control and coercion.

Fifty years ago, long before the first Internet, the Canadian scholar and policy analyst Douglas Parkhill chose the democratic vision in his book about the need to create a global system of computer utilities that guaranteed public control and universal access. Social movements had helped to tame private monopoly control over earlier essential resources like water and electricity by turning them into public utilities. Parkhill made the case that information was no less essential and no less in need of public control. The Next Internet presents us an opportunity to build on his vision. M

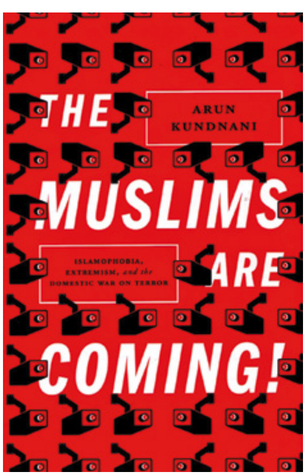
Essay by Clare Mian

“We are here because you were there.”

Two very different takes on the evolution of western responses to terrorism



RELIGIOUS RADICALIZATION AND SECURITIZATION IN CANADA AND BEYONDY
EDITED BY PAUL BRAMADAT AND LORNE DAWSON
University of Toronto Press, 2014, 344 pages, $32.95



THE MUSLIMS ARE COMING! ISLAMOPHOBIA, EXTREMISM AND THE DOMESTIC WAR ON TERRORY
ARUN KUNDNANI
Verso Books, 2014, 256 pages, $32

THE EDWARD SNOWDEN revelations of 2013 cast a long shadow over discussions of national security and surveillance across the western world. In Canada, for example, despite two startling incidents on Canadian soil in October 2014—the attacks on Parliament in Ottawa and against the Canadian Forces in Quebec—the public mood for expanding the powers of Canada's security agencies quickly waned after the introduction, in January 2015, of Bill C- 51, the Anti-Terrorism Act 2015. In fact, the legislation galvanized Canadian society and influenced voting intentions many months later in the federal election.

At the same time, the public seems to have lost sight of the history of anti-terrorism legislation in this country. The 2015 bill was, in most respects, merely a follow-up to the 2001 Anti-Terrorism Act, passed immediately after the 9/11 attacks on New York and Washington, D.C. It also complemented a series of more recent reforms, including the Combating Terrorism Act of 2013, and other legislation that can be seen as the Harper government's multi-part volley in the "war on terror."

Each new law has progressively widened the range of activities for which Canadians can be criminally charged, increased the powers of law enforcement agencies, and amended related acts (e.g., the Criminal Code) in order to broaden judicial powers of investigation and prosecution. This bundle of legislation reflects the Harper government's belief that “Terrorism remains the leading threat to Canada's national security.” According to Steven Blaney, former minister of public safety, “Our government will continue to take all appropriate action to counter terrorist threats to Canada, its citizens and its interests around the world.”

In fact, the Statistics Canada crime rate for terrorism was below one incident per 100,000 population in 2014, as it was in 2012 and 2013. Despite this, the agency asserts that terrorism violations were up 39% in 2014, bucking the trend of declining crime rates. This is derived by calculating the increase in the number of reported terrorism incidents (rather than the rate) between 2013 and 2014, from 76 to 100. It is an astounding example of misleading reporting by Statistics Canada.

The actual threats to Canadians come from accidents and illness, chiefly heart disease and cancer, with homicide reaching the top ten causes of death for those under 25. Both cancer and heart disease have been linked to poverty, as has accidental death among children. Regrettably, developing the complex legislation and matching funding to solve these long-standing causes of death lacks the headline-grabbing appeal of fighting “terror.”

Against this backdrop of government fear mongering on smaller threats and ignoring bigger issues, two recent books take drastically different approaches to the issue of terrorism.

Religious Radicalization and Securitization in Canada and Beyond, edited by Paul Bramadat and Lorne Dawson (University of Toronto Press, 2014), is unusual both for its focus on Canada and its explicitly political intent, as seen in its dedication to “academics and government policy-makers working to keep Canada safe from the threat of terrorism without sacrificing the religious and cultural diversity, and mutual respect that distinguish Canadian society." A political party could not have come down solidly on both sides with such finesse!

Bramadat and Dawson cast a very narrow net around their subjects: "violent forms of religious radicalization" and "securitization." They believe religion has been overlooked as a major factor in radicalization, neglected by western scholars who have mistakenly embraced the inherent superiority of secularism. They define radicalization as a "growing readiness to pursue and support far-reaching changes in society that conflict with, or pose a direct threat to the existing order."

Using surprisingly weak words, they define religious radicalization as "the processes by which individuals and groups with a wide range of motivations come to embrace religious feelings, beliefs and practices that put them *very severely at odds with their society and (often) their family members,*" and securitization as "the way in which the state and society *frame* the individuals and groups drawn to radical religious subcultures" (emphasis added in both cases).

The latter term (securitization) is actually borrowed from the financial world, used to describe how assets are transformed into a security. It has been adopted by mainstream international relations to refer to the way "subjects" are "transformed" (not "framed") into matters of security, thus enabling the state to take extraordinary means to assure its own security against them. Concerned, perhaps, that focusing exclusively on Muslims might appear to equate Islam with terror, Bramadat and Dawson include chapters on the Sikhs and Tamils of Canada, as well as some violent actions associated with the Aum religion in Japan.

In contrast, *The Muslims are Coming! Islamophobia, Extremism and the Domestic War on Terror*, by Arun Kundnani (Verso Books, 2014), casts an extremely wide net on its subject, with two significant differences from the Bramadat and Dawson book: it provides a much needed historical analysis of events before and after 9/11, and it tackles head-on the issue of racism and the fact that Muslims are very much the targets of this ongoing "war."

Bramadat and Dawson oppose the "conflation of race and religion." They buy into the beliefs that the terrorist threat is severe and ubiquitous, and that as scholars their role is to isolate the religious factor in the identification of potential Muslim terrorists. Kundnani, on the other hand, believes that "cultural markers associated with Muslimness are turned into racial signifiers," such that Islamophobia becomes a "form of structural racism directed at Muslims." He considers terrorism a political response to western foreign policy, and finds attempts to identify early indicators of terrorism among Muslims as at best misguided and at worst racist.

Waking up Muslim on September 12, 2001, in Europe as in North America, was not easy, and it got worse as the U.S.-led coalition launched a "war on terror" that came across as a war on fanatical Muslims intent on destroying the free democratic western world. The U.S. president George W. Bush attempted to distinguish between Al-Qaeda and peace-loving Muslims, and the early phase of the war focused on military action in Afghanistan and Iraq, and on possible Al-Qaeda "sleeper cells" in the West. But deep suspicion of Islam began to take shape.

Global opinion fell into two categories, which Kundnani calls "culturalism" and "reformism." Culturalists see violent extremism as inherent to Islam; reformists believe that 20th century ideologues have distorted Islam's true meaning. Neither view acknowledges the political history of relations between the West and the Muslim world, and the vital influence of political events on the daily lives and opinions of those affected. It is in making these crucial links that Kundnani's book excels.

At the end of the Second World War, the old colonialist powers (the U.K. and France) and the newly dominant United States deliberately turned the Islamic world into a military, economic and ideological battleground in their war against Soviet communism. From the 1950s to the turn of the 21st century, these countries frequently undertook overt (Afghanistan, Iraq) and covert (Somalia, Yemen, Pakistan) actions, usually with NATO or UN blessing, in countries across North, East and West Africa, in the Middle East and in South Asia. These actions were meant to shore up regimes that supported the West, regardless of political or religious labels. The unprincipled, power-seeking route they charted has culminated in the Syrian tragedy and the emergence of the so-called Islamic State (ISIS or ISIL).

With the 2004 murder in Amsterdam of Dutch filmmaker Theo van Gogh, and the 2005 London transit bombings by perpetrators found to be European Muslims, the domestic front of the Global War on Terror expanded; the hunt for "homegrown" terrorists began. Enabled by legislation hastily adopted in 2001 and continuing into the present, major western law enforcement agencies upgraded electronic surveillance capabilities and enlarged their informant base. Mosques and communities were "securitized" using infiltration techniques developed by the FBI's COINTELPRO program against Black civil rights activists and student organizations during the 1960s and '70s.

Kundnani looks at the effects of the domestic "war on terror" on a long-standing Muslim community in Michigan, and a new Somali Muslim community in the Minneapolis-St. Paul area. Well before the Second World War, Henry Ford had begun to recruit Muslims from Asia and the Middle East to work in his Detroit factories. By the 1970s, Michigan Muslims had achieved fairly high levels of income and education and "were at the door of what's called 'whiteness' in America." These Muslims condemned 9/11 and experienced, with horror, the dangerous vulnerability of being associated with Muslim terrorists who appeared to be threatening the world they had themselves adopted. Even high-income professionals of Arab descent began to experience airport delays and were regularly refused travel visas.

Among the Somali community in Minnesota, surveillance and the prevalence of informants was particularly strong because of suspected recruitment by Al-Shabaab, the Al-Qaeda affiliate operating in the southern Horn of Africa. Lacking the knowledge and trust of the community they are attempting to infiltrate, surveillance programs usually lead to fear, and to the breakdown of those very community networks that normally foster the solid education of youth and the rejection of violence. The option of peacefully vocalizing opposition to U.S. foreign policy does not exist for these youth. The loss of their right to freedom of expression and assembly has insidious long-term human consequences.

Lorne Dawson's chapter on the "Toronto 18" (only 10 were charged) in the Bramadat-Dawson book starts with an exposition of the methodological difficulties of studying terrorist networks; for example, the impossibility of creating a control group! Because Dawson is focused *a priori* on isolating the role of religion in the radicalization of "Salafi-jihadist terrorists," terms that are not defined in a chapter full of hair-splitting definitions, what emerges is a sketchy picture of a "fairly aimless lot."

They are 10 young men with mid-level education and occupations, who were either born here or who came to Canada in their youth. All were raised in Toronto suburbs in fairly non-religious families. They came together in school and social groups focused on Islam. At least one reported experiencing post-9/11 discrimination. Dawson has absolutely no interest in the content of their opinions of political events either in their country of origin or their adopted homeland.

In the same collection, Uzma Jamil studies one working class and one middle class Muslim community in Montreal. While the former felt more vulnerable, both groups believed "they are perceived negatively or are under greater scrutiny by majority groups in Canada" and—though, again, this was felt more markedly in the working class community—were reluctant to discuss politics among themselves or with their children. One Iraqi teenager felt that discussions of 9/11 were all about the suffering of the American people, "but I just don't like talking about it because I know they feel sorry for their people, and I feel sorry for my people, so that's why I don't like getting into a discussion."

RCMP members of Air Task Force-Iraq participate in a March 2015 combat search and rescue exercise for personnel of the Middle East Stabilization Force, which is conducting operations against Islamic State. Op Impact, DND

The extremists responsible for the *Charlie Hebdo* and Paris Hypercasher shootings were Muslims born in France of parents from former French colonies. The Tsarnaev brothers, responsible for the Boston Marathon bombs, were from Chechnya, but had come to the United States in their youth. Dzhokhar, the surviving brother, wrote the following in the hours before his arrest: "The U.S. government is killing our innocent civilians, but most of you already know that..."

Martin Couture-Rouleau, who was responsible for the St-Jean-sur-Richelieu hit-and-run, was a Québécois recent convert to Islam who opposed the victimization of Muslims. Michael Zehaf-Bibeau, the Parliament Hill shooter, converted to Islam in 2004 and had a Libyan-Canadian father. He explicitly referred to his opposition to Canadian policy in Africa in his online communications.

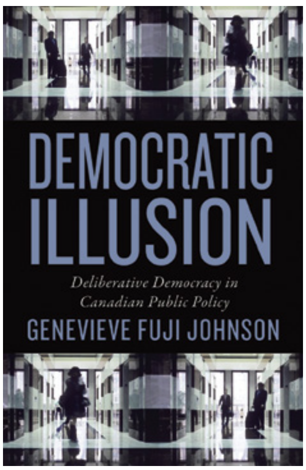
Bramadat and Dawson would have us believe that with "more data, better data and more exacting analyses," our public safety will be increased. But, in the end, even some of their own contributors and the studies they cite claim "there is no typical terrorist or path to terrorism."

Kundnani's view of terrorism is much more nuanced, realistic and ultimately comforting. It recognizes that the kind of manoeuvering the United States, Canada and Western Europe have pursued in Africa, the Middle East and Asia—the most egregious case being possibly their support/non-support of the Syrian government—will continue to produce desperate suffering and injustice. It is naïve to think this will not sometimes produce individuals or groups who choose violent terrorism as a response to these injustices.

For much of the 2015 federal election campaign, former prime minister Harper was caught between public pressure to allow refugees from the Syrian horror into Canada, and the self-imposed need to remind us that this would increase the risk of terrorism. In a phrase coined by Sri Lankan Muslim activist A. Sivanandan, "We are here because you were there." It is time for Canadians to understand the connection between policies we have allowed our governments to pursue and the consequences that come home to us. M

Reviewed by Maggie FitzGerald Murphy

Democratic processes and outcome illusions



DEMOCRATIC ILLUSION: DELIBERATIVE DEMOCRACY IN CANADIAN PUBLIC POLICY

GENEVIEVE FUJI JOHNSON

University of Toronto Press (April 2015), 200 pages, $24.95.

QUESTIONS OF DEMOCRACY are plentiful around elections. From the evening news broadcast to the office coffee room, Canadians are talking about politics, political processes and the "power" of a vote. Genevieve Fuji Johnson's recent offering, *Democratic Illusion: Deliberative Democracy in Canadian Public Policy*, turns our attention to democratic processes beyond the electoral race, and challenges the reader to consider the potential, and indeed limitations, of deliberative democracy.

According to Johnson, deliberative democracy refers to democratic systems of governance based on the involvement of citizens in the exchange of ideas, debates and, ultimately, the creation of laws and regulations that best reflect their needs and interests. Johnson explores four case studies in which alternative democratic systems were employed to help address a policy issue. These case studies are well chosen, as they cover a range of issues, geographies and levels of government (municipal to federal) in Canada. They also provide a sample of the varied forms of deliberative democracy such as participatory budgeting, deliberative polling and various consultation processes.

In each case the context in which deliberative democracy initiatives are implemented is of the utmost importance. Johnson explores how factors such as how an issue is framed, the policy requirements, and main economic and strategic aims can work to reinforce or, alternatively, negate the deliberative democratic process. By placing these initiatives in their greater political-socioeconomic landscapes, Johnson shows how the outcomes would likely be the same under normal (non-deliberative) democratic systems.

In contrast to "traditional" political processes that are dominated by government elites (often in a shroud of secrecy), the deliberative cases explored here seek to include a variety of stakeholders in the early and sometimes even later stages of policy formation. Johnson highlights how such inclusionary practices contribute to the empowerment of citizen participants, who report becoming more informed about particular issues, feeling engaged and, most importantly, feeling heard. But she goes further by probing the impact of these processes on policy outcomes.

For instance, in chapter three Johnson presents the case of deliberative polling in Nova Scotia, which was meant to involve the public in the management of the demand and supply of electricity in the province in the early 2000s. While the deliberative polling process allowed Nova Scotia Power Incorporated (NSPI) to hear from a variety of Nova Scotians, Johnson argues that provincial policy would have led the process to the same outcome regardless of whether the polling had occurred.

"[This] raises interesting questions concerning the legitimacy of the outputs of these kinds of forums vis-à-vis those of more traditional legislative processes," she writes. "The outputs of NSPI's forums were superseded by provincial policy, but they were generally consistent with the values embodied in that policy. Had they been at odds, which should have prevailed?"

According to Johnson, this is not a unique result. In each of the four cases she presents, the outcomes of deliberative democratic initiatives often depended on external factors including the broader policy context. Thus, while these deliberative democratic procedures may have been empowering for the citizen participants in moments of engagement, they ultimately did not challenge the status quo approach to policy development and implementation, and were therefore ultimately non-empowering.

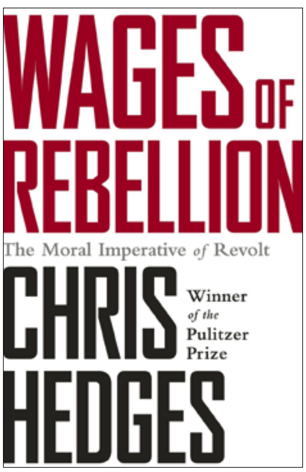
While public engagement is, of course, important, when it does not align with the actual outcomes of policy processes it can be (mis)used to garner public trust, says Johnson. The governing bodies that undertake deliberative democratic initiatives often maintain a power imbalance, as they are the constructors of the problem, discourse and possible solution set. Further, these bodies maintain the ultimate decision-making power. Thus, while deliberative democracy is theoretically a powerful alternative to legislative procedures that tend to involve an elite set of decision-makers, in practice such initiatives may simply (re)produce "mere illusions of democracy."

The important distinction between processes and outcomes is applicable to the democratic electoral process as well. When citizens vote, they may feel empowered and involved in the political system. But oftentimes when a voter's favoured candidate does not win, Parliament can appear to be comprised of representatives that do not reflect voter interests and perspectives. Even when one's chosen candidate is elected, the promises made during campaigns may be set aside, and citizens may feel powerless in terms of political decision-making beyond the actual election.

The question of whether democratic processes and outcomes align (in either the context of traditional political processes or deliberative democracy initiatives) has never been more relevant or more pressing. Johnson's book provides an interesting angle from which to consider such democratic concerns in general, and for that reason it is a welcome contribution to the field of Canadian politics.

Reviewed by Frank Bayerl

Rebel without a rebellion



WAGES OF REBELLION

CHRIS HEDGES

Alfred A. Knopf Canada (2015), 286 pages, $32.00.

REBELLION, ARGUES CHRIS Hedges in his newest book, is a moral imperative given current conditions in the United States. He has no faith in the democratic system, so perverted by corporate power and elite influence that the wishes of the people no longer count for anything, and little time for the electoral system, which has been bought by those with the money to do so, aided notably by the U.S. Supreme Court's *Citizens United* decision.

Hedges can sound depressingly downbeat, as he did during a talk in Ottawa this spring—an Old Testament prophet issuing jeremiads and apocalyptic pronouncements, and scorning those who still naively believe the system can be reformed. *Wages of Rebellion*, as you might then expect, is long on rhetoric and too often takes for granted that readers will agree with its author's views, and what we're looking for is useful evidence, or knowledge, to extricate ourselves from the situation Hedges so painfully describes.

Is there really no shade of difference between, say, the administrations of George W. Bush and Barack Obama? Not to Hedges. He is given to sweeping statements such as, "The right-wing Federalist Society, after its founding in 1982, unleashed a frontal assault on the legal system that has transformed it into a wholly owned subsidiary of the corporate state." Hence the need to overthrow the established order. But how?

Hedges tells us that historically revolutions are started by disaffected members of the middle class and alienated members of the ruling class. They are triggered less often by poverty (or the poor and working classes) than by disappointed expectations. Hedges won't predict the likelihood of (another) U.S. revolution, but believes that without rebels we are doomed. Change will come only from mass movements and large-scale acts of civil disobedience, he writes.

Americans live under a system of "inverted totalitarianism," a term coined by political philosopher Sheldon Wolin that Hedges treats as interchangeable with corporate totalitarianism. It is now impossible to rely, as in the past, on unions and opposition parties to lead a rebellion because both have been rendered nearly powerless. Instead, the working poor along with unemployed students and college graduates, journalists, artists, lawyers and teachers will form the core of the movement for change. While, according to Hedges, political ferment appears to be dormant in the United States at present, the real work of revolutionary change is taking place beneath the surface, and "no one knows where or when the eruption will take place."

If the timing of rebellion is left unexplained, Hedges takes a shot at what form it will take: a breakdown of American society will trigger a popular backlash like the Occupy movement, but also a violent vigilante reaction targeting minorities, dissidents, activists and radicals. "The longer we remain in a state of political paralysis, dominated by a corporate elite that refuses to respond to the growing misery and governed by an ineffectual liberal elite, the more the rage of the white male underclass will find expression through violence," he warns.

The question of violent versus non-violent revolution is treated frequently if inconsistently in *Wages of Rebellion*, illustrated at one point by Wiebo Ludwig's campaign against hydraulic fracturing (fracking) in Alber-

Author Chris Hedges

ta. The eccentric Christian preacher from a remote religious community engaged in acts of sabotage against gas companies after fracking caused birth defects in his farm animals, human and animal miscarriages, and poisoned two of his wells. The escalating battle eventually led to a death when someone on Ludwig's property shot at rowdy local teenagers trespassing at night. Hedges condemns violence in the name of revolution, but supports civil disobedience as sometimes the only way to oppose the actions of the corporate state.

The wages of the book's title are the consequences of rebelling. The author looks at various quite ordinary and not-so-ordinary people in American society who have paid the price for their courageous actions. Most readers will know Edward Snowden, but we are introduced to lesser-known victims including attorney Lynne Stewart, who was persecuted for defending accused terrorist Omar Abdel-Rahman in 1995. Abdel-Rahman was convicted and had restrictions placed on his ability to communicate with the outside world. For releasing a statement from her client to the press, Stewart was prosecuted by the Bush administration and sentenced to 28 months in prison, later increased on appeal to 10 years! (She received a compassionate release in December 2013 because of her terminal breast cancer.)

The prison system is one of the ways the corporate state deals with dissent, writes Hedges. Mass incarceration, which increased considerably after a 1994 omnibus crime bill, can be seen as an attempt at social control—to thwart Black radicalism, for example, and intimidate anyone who tries to resist the status quo. The privatization of prisons and the use of inmates as a kind of slave labour suggest to Hedges that prison reform cannot happen because the system feeds corporate profits. The basic problem, he writes, is not really race or poverty, but the predatory nature of capitalism itself.

Throughout the book Hedges uses the story of *Moby Dick* as a central metaphor. Captain Ahab's demented and monomaniacal pursuit of the white whale is a pursuit of profit, a hunting-down of valuable and disappearing resources. Hedges makes an explicit link between this pursuit and the nature of capitalism. "Our corporate hustlers are the direct descendants of the whalers and sealers, of butchers such as George Armstrong Custer, of the gold speculators and railroad magnates who seized Indian land, killed off its inhabitants and wiped out the buffalo herds, of the oil and mineral companies that went abroad to exploit the resources of others." Hedges agrees with Walter Benjamin that capitalism is an essentially religious phenomenon in that it seeks to allay the fears and anxieties of human life by calling on us to seek fulfillment in the endless amassing of money and power.

The question of violent versus non-violent revolution is treated frequently if inconsistently in the book.

The antidote, Hedges argues, is a new economic philosophy to replace the theory of individual self-interest and rational choice. He quotes Oxford economist Avner Offer: "Economics, political science, and even philosophy, ever since rational choice swept through the American social sciences, have embraced the idea that an individual has no responsibility towards anyone except himself or herself. A responsibility to anyone else is optional." This is not a model that will serve us well in a future dominated by proliferating scarcities due to ecological deterioration.

Hedges ends his book with theologian Reinhold Niebuhr's description of the "sublime madness" possessed by those who defy the forces of injustice and repression. The rebel listens only to the promptings of his or her conscience, is deaf to criticism, and rejects calls for moderation and patience, following instead the dictates of the inner voice. This is problematic in that it appears to make the rebel indistinguishable from the fanatic. It is an unresolved tension that runs throughout the book, next to Hedges's advocacy of non-violence and apparent admiration of some who have committed acts of violence. M

Chandra Siddan

Method to madness at TIFF 2015

EVERY YEAR, SOMEONE asks me if this Toronto International Film Festival was better than the last and every year I am mystified by the question. It is hard to answer because you inevitably miss so many of the 400+ films on offer, the cream of the annual crop of global cinema. It always feels, during those 11 days of TIFF, like I am running a gauntlet of temptations. Despite a carefully written list, I lurch here toward the shamelessly popular and there back to films that will never get theatrical distribution.

All I can hope to do in this small space is tell you which of the films from my list were the most satisfying, and to try to convince you why. Near the top was undoubtedly *The Forbidden Room* by Guy Maddin (*The Saddest Music in the World, My Winnipeg*) and Evan Johnson (*Bring Me the Head of Tim Horton*). This imaginative, hilarious and exasperating sendup of abandoned cinematic narratives and techniques springs from a 2010 TIFF-commissioned installation, *Hauntings*, in which Maddin imagined the dropped projects of the world's great filmmakers, including Mizoguchi, Naruse, Sternberg and Lang.

This new Maddin-Johnson co-production presents a cast of characters and narratives as a collage of different films, each with its own story, one occasionally worming itself into another. End credits from these separate short films/trailers appear throughout, introducing the characters and the actors playing them: Mathieu Amalric, Udo Kier, Geraldine Chaplin. It is meta cinema. Framed by that wordy, tongue-in-cheek narrative voice familiar to those who have seen Maddin's *Brand Upon the Brain*, the stories involve puppet-like characters, types more than complex individuals.

Still from *The Forbidden Room*, co-directed by Guy Maddin and Evan Johnson.

There is the young woman on a motorbike, hungry for life, roaring down a road, who, distracted by ducks, crashes, breaking 47 bones. The doctor who mends her is sucked into the schemes of a bone insurance racketeer, after which his brother, also a doctor, decides to re-break the woman's bones so he can heal her correctly this time. We meet a young lumberjack out to rescue the love of his life, and the tribesmen who seek to feed the flapper who has crash-landed into their volcano. A strong-chinned diplomat develops an obsessively ambivalent relationship with a bust of Janus while trying to sell *and* buy it at an auction. The lazy husband, the tragic widow... The list goes on, with each caricature played by a top actor of the western world.

The dominant theme of *The Forbidden Room* is madness and humanity's pitiable attempts to heal it, since the healers themselves are mad. The predatory doctor who takes a caged madman on a train journey also seduces a fellow traveller into sexual submission and mind control. The patient learns through extreme analysis that her childhood was stolen, but when provided access to her self as a young girl chooses to shoot her.

There is a method here. Maddin's connection to the subconscious is as strong as David Lynch's (*Twin Peaks, Mulholland Drive, Lost Highway, Inland Empire*). Both directors focus on reason's blind spots, the booby traps to other unthinkable realms. The intense brain-sawing soundtrack seems designed to further foil any attempt to consciously grasp this film. If I can venture a guess, I would say it is about humanity's propensity to perpetually trip over our emotions in the pursuit of high-minded goals and rational decision-making.

Toronto filmmaker Alan Zweig (*Vynil; I, Curmudgeon; 15 Reasons to Live*) also engages with mental health and worldly failure in his new documentary *Hurt*. It is a portrait of Steve Fonyo, who as an 18-year-old lost a leg to cancer and ran across Canada on a prosthetic limb to raise money for cancer research. Fonyo was celebrated at the time as an all-Canadian hero. He received the Order of Canada in 1985, then the youngest person to be offered the honour.

But when Zweig visits Fonyo (now in his late 40s) in Whalley, British Columbia, he finds a man living a hardscrabble existence fixing cars, sunk into a rut of substance abuse, unstable relationships and petty crime, and stripped of his Order of Canada. The camera captures Fonyo's private life with surprising intimacy, while other characters express themselves freely to Zweig. The empathetic filmmaker himself becomes a character in his subject's life, urging Fonyo toward healing and therapy.

At one point in the disastrous odyssey, Fonyo confronts the question of why the Order of Canada was taken away from him when it was given for what he had already achieved. Zweig suggests it could be because Fonyo no longer lives the life of a hero. But you could reasonably ask whether he would not now be considered a failure had he never received the award to begin with. Did the Order of Canada not imprison him in a virtuous life of success—a life he rejects?

It does feel as if Fonyo set out to subvert success through his dangerous liaisons with drug-addicted lovers and their violent exes cooped up in murderous neighborhoods. Despite the joys in his risky life, Fonyo cannot theorize his right to be a failure because he is overwhelmed by the general vocabulary of success. The film, understandably in the face of its protagonist's suffering, urges him to become able or "whole" again. In the process it falls into an assimilationist and ableist discourse so typical in portrayals of mental health and disability.

In the book *The Queer Art of Failure* Judith Halberstam challenges conventional understandings of success in a hetero-normative capitalist society. Her "low theory" offers a minoritarian trajectory derived from observing eccentric and subversive counterintuitive forms of resistance. For Halberstam, failure sometimes offers more creative, co-operative and surprising ways of being in the world, even as it forces us to face the dark side of life, love and libido. Failure broadens the scope of our existence.

I Smile Back, directed by Adam Salky (*Dare*), also refuses to be swept up in the hetero-normative tyranny of positive thinking. Based on Amy Koppelman's book of the same name, the film tells the story of a wealthy suburban wife and mother destroying her life through drugs and sex addiction without any workable solution. Sarah Silverman's uncompromising performance in the lead peels off her customary comedian's mask to present an irreducible failure who refuses to be healed, offering instead, perhaps, another way of being. M

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Today, the analysis of environmental problems cannot be separated from the analysis of human, family, work-related and urban contexts, nor from how individuals relate to themselves, which leads in turn to how they relate to others and to the environment. There is an interrelation between ecosystems and between the various spheres of social interaction, demonstrating yet again that 'the whole is greater than the part.'

EXCERPT FROM LAUDATO SI',
POPE FRANCIS'S ENCYCLICAL LETTER
ON CLIMATE CHANGE GIVEN IN ROME
AT SAINT PETER'S ON MAY 24, 2015.