Conservation and Climate Change: Steps Toward a Green New Deal

This generation's greatest challenge — confronting climate change and transitioning off of a carbon-dependent economy — cannot be accomplished if we maintain a separation between programs for economic growth and job creation, on the one hand, and environmental action on the other. We need a plan that integrates the priorities of maintaining a habitable planet, and providing decent, stable livings for working people. This integration has most recently been captured in the notion of a Green New Deal. (See Budget Paper A.) Manitoba can't produce a Green New Deal on its own. This requires a massive push from the federal government, and innovative financing to help create the green jobs and infrastructure we need to build. However, the provincial government does have the capacity to begin, at our local level, to do our share to fight climate change while putting Manitobans to work in good jobs.

Funding Transition: A Carbon Pollution Levy

In 2018/19, the "Made in Manitoba Climate and Green Fund" was allocated $39.9 million within the $203 million Sustainable Development budget. In 2019/20 this was $40 million and was directed to fund Climate and Green Plan implementation and the recommendations of the Expert Advisory Council. The anticipated emission reductions in the current Carbon Savings Account amount to a woefully inadequate target of less than 1 megatonne cumulative in the first 5-year period.

In order to fund a more ambitious and appropriate objective, the APB maintains and supplements this with funding from a carbon pollution levy. Manitobans are already subject to the carbon pricing of the federal Pan-Canadian backstop of $30/tonne in 2020, rising to $50/tonne in 2022 with 90 per cent of revenues rebated tax free to Manitoba households, and only 10 per cent directed to climate-mitigating investments. We recommend the province instate its own carbon pollution levy to replace the federal levy, and significantly increase the targeted investment portion.

A carbon pollution levy is an essential part of a comprehensive approach to combating climate change. It is most effective and fair if it increases over time in a predictable manner to enable planned responses and innovation and if it is applied uniformly and consistently across jurisdictions. While challenging to fossil-fuel dependent activities in the short term, it is essen-

3 photos: Global Climate Strike, Manitoba legislature September 27, 2019

tial for a timely transition to a cleaner economy and economically beneficial over time.

Carbon pricing has an important structural role:

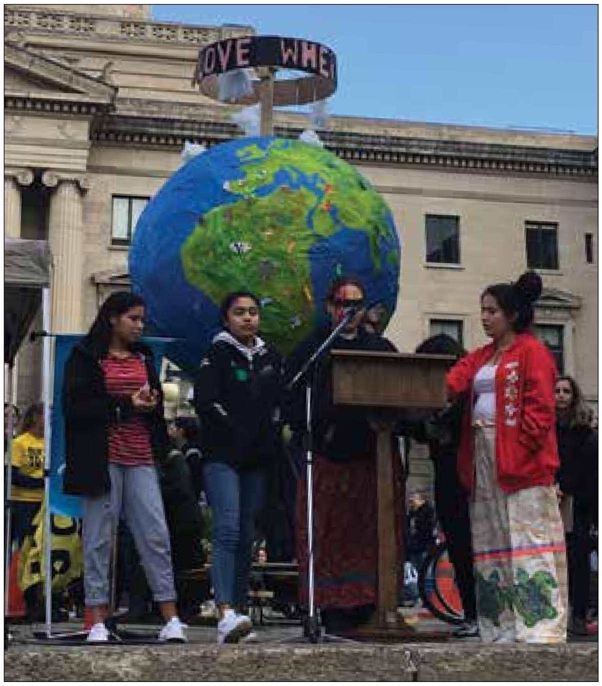
- It recognizes that when we burn fossil fuels we contribute to the harms and costs of climate change
- It imposes a "polluter pays" environment
- It levels the playing field to make cleaner alternatives more competitive
- It provides a pool of funds to compensate impacted families and for clean tech and infrastructure that facilitate less-polluting alternatives and behaviour
- It gives incentive for emitters to change behaviour and invest in ways to reduce their emissions and fossil fuel consumption.

The APB replaces the current federal backstop with an equivalent Manitoba-controlled carbon pollution levy. At $30/tonne for 2020, the tax should yield approximately $300 million in revenues. These carbon pollution levy revenues will be separately and transparently accounted for.

Total New Revenue: $300M

Protecting Low- and Middle-Income Households

The APB allocates one third of carbon pollution levy revenues ($100 million) to mitigate the impact of the levy on lower- and middle-income individuals and households through direct payments to preserve or enhance social equity. The Eco-fiscal Commission estimates that 12.5% of carbon pollution levy revenues can offset the



impact on households in the lowest four income deciles.
New Expenditure: $100M

Building a Green Economy

Fighting climate change is not only — or even primarily — about getting a price on carbon. Just increasing the individual costs of getting around, staying warm and putting food on the table isn't enough, and it impacts low-income families and households more than others. The low-income dividend built into the APB means that this effect is moderated or reversed. But a robust climate policy means building new energy systems, new food systems, and new ways of getting around and — in Manitoba — keeping warm.

That's a challenge that many governments around the world are taking on, but so far, in Manitoba, we are lagging. There are many cities, states, and provinces that are moving forward much more quickly to build the low-carbon and climate-resilient infrastructure that will be needed in the decades to come. We know that spending on greenhouse gas mitigation is fiscally prudent as well. Government funding for reducing the likelihood of hazards like increased flooding or wildfires resulting from climate change pays off at an estimated rate of 6:1, relative to paying for the costs after-the-fact.[1] Failing to meet this challenge costs us all in the long run.

The Pallister government's "Manitoba Works" program consists of a tried-and-failed model of reducing taxes and deregulating, in the hopes that private capital will flock to the province and create jobs — of whatever quality, doing whatever work the private sector deems profitable — with the wealth then trickling down to the rest of us. This is an economic model that has never worked for working people. And in the context of a climate emergency, we urgently need to put people to work building a new, green economy. We have local leaders in the business community taking this challenge on, we have a social enterprise sector with expertise in creating green jobs — including training and preparing individuals who face various labour market barriers, and we have workers with the technical skills and expertise to build the new economy. Putting all of this into action and scaling it up requires support from the public sector.

A climate policy in which Manitoba does its part to keep the planet below 1.5 degrees of warming means getting more Manitobans to work on building low-carbon energy, transportation, public buildings, and housing — as well as reinvesting in green jobs in the public sector, like health care workers and educators.

Bang for the Buck: High-Impact Initiatives

The Alternative Provincial Budget focuses on public spending that can make the biggest difference in terms of reducing our greenhouse gas emissions and creating good jobs in an equitable way: supporting green local economic development and community priorities, transforming transportation infrastructure, and a substantial building retrofit program.

Buildings Retrofit: (with Efficiency Manitoba)

About 21% of Manitoba's greenhouse gas emissions came from stationary combustion sources in 2017, much of which is from heating residential, public, and commercial buildings. Old housing stock and cold Manitoba winters make for high energy use, and we can make a substantial reduction in this through home, farm, and public building retrofits, while putting thousands of Manitobans to work in good jobs. Housing and building retrofits are labour intensive, offering good employment benefits (see APB chapter on Community Economic Development and chapter on Northern Development and Training). The APB allocates, in addition to Efficiency Manitoba's funded budget (from Manitoba Hydro) of $70 million, $546 million over five years to incentivize energy retrofits of homes, apartments, and to pay for retrofits of social housing, schools, universities and colleges, hospitals, and other public buildings. This is 20% of what Ontario had initially budgeted in its Climate Change Action Plan for the same purpose — so it's twice as ambitious given the size of our economy and population.

Funds would be used to upgrade and replace heating, cooling, and ventilation equipment, replace natural gas furnaces and boilers with low-carbon alternatives, and to increase the energy efficiency of building envelopes. Efficiencies could be gained, for example, by subsidizing the upfront capital costs of non-fossil fuel heating systems like heat pumps and geothermal installation. We estimate that this will generate 3500 high-quality jobs for Manitobans,[2] before re-investment of energy savings, and the public building retrofits alone will reduce greenhouse gas emissions by 100 kT of CO_2e per year.[3] Home and apartment retrofit incentives will be modeled on the City of Toronto's successful Home Energy Loan Program and the High-Rise Retrofit Improvement Support Program.
New Expenditure through Efficiency Manitoba: $109.2 million

Furthermore, the province will dedicate $5 million through Economic Development and Training to supplement the federal government's promised $100 million in retrofit job training[4] to ensure that there are sufficient, trained workers to undertake retrofits and audits. These provincial funds will be geared specifically toward targeting job training for individuals facing labour market barriers, working with Manitoba social enterprises, and will dovetail with a restored Co-op Promotion Board and an enhanced Co-op Loans and Loans Guarantee Board to promote cooperative formation (see APB chapter on CED and Northern Development and Training).
New Expenditure: $5 million

Government procurement policies should target services from social enterprises and ENGOs to deliver retrofits and provide education, demonstration, awareness and social marketing to promote sustainable choices (see Budget Paper C for more on Procurement).

Green Transportation Infrastructure and Operations (with Municipal Relations)
Working with municipal relations, the APB would begin moving Winnipeg and other municipalities toward smarter, climate friendly transportation systems. Winnipeg in particular needs a build-out of multi-modal transit that works for everyone. Pouring ever more money into fixing a sprawling car-based transportation infrastructure doesn't work for anybody — including people who will continue to be dependent on cars. Winnipeg has a massive infrastructure deficit, thanks to decades of neglect and a sprawling footprint relative to population growth. A climate-friendly and efficient transit system moves people, not automobiles. With about one-third of Winnipeg's GHG emissions coming from residential vehicles, and another 18% coming from commercial vehicles, the city could make a substantial dent in its emissions by getting more people moving in different ways. All of this requires a substantial investment in transportation infrastructure, and ensuring that the operating funding is in place to make use of it. The federal contribution to this, starting in 2019, is $546 million over 10 years for public transit. The APB chapter on Municipal Relations provides more detail on this topic.

The APB would first of all restore the targeted funding lost through the Pallister government's scrapping of the 50–50 cost sharing agreement in place since the 1970s. The City of Winnipeg estimates that this would return about $8.3 million in annual operating funding. The APB would bolster this with a further investment in public transit, funded annually at $25 million, to help develop a Frequent Service Transit Network as envisioned in the CCPA 2018 Alternative Municipal Budget, to support the low-income bus-pass, and to aid in the implementation of the Winnipeg Transit Master Plan. Using the employment impacts of investment in public transit capital and operations generated by the American Public Transport Association, we estimate that this will generate about 700 good jobs in construction and transit operations.[5]

The APB also invests $5M in transportation for communities outside of Winnipeg. Many were hit hard by the loss of the Greyhound Bus service, and those in remote communities experience hardship in shopping and getting to medical appointments.
New Expenditure: $38.3 million

The Winnipeg Transportation Master Plan also identifies several other areas of investment required to encourage a modal shift and to make the capital's transportation system more sustainable. While investment in active transportation (AT) infrastructure has increased, there are critical gaps in the active transit network that make walking or biking more difficult, less safe, and therefore less accessible. In particular, shared and AT-only river and rail crossings were identified as a means of integrating the Winnipeg AT and multi-modal network. The CCPA's 2018 Alternative Municipal Budget recommended the fast-track completion of AT crossings, downtown separated bike lanes, the development of "cycling spines" or super-corridors for cycling that link key nodes in the city, and the construction of neighbourhood greenways. The APB would allocate $3.1 million for new AT infrastructure — 50% of the estimated cost. This would not only encourage modal shift for transportation, but provides a host of other health-related cost savings.

This expenditure is also discussed in the Municipal Relations section of the APB.
New Expenditure: $3.1 million

EV and E-Bus Incentives:
The APB would allocate $7 million in an interest-free loan to Winnipeg transit for the purchase of 20 electric buses, as an initial boost to the transit fleet. The buses are projected to pay themselves off through a Pay As You Save model, based on lower operations costs, over 6 years.

Budget Paper A has more background information on this topic.
New Capital Expenditure: $7M

Winnipeg transit, though, accounts for a tiny 0.8 per cent of the city's transportation-related greenhouse gases, and while getting people out of single-occupant cars is key, accelerating the purchase of EVs also offers a way to bring down our emissions. The APB would follow the path of the "CEVs for BC" program, offering $3,000 for battery, fuel-cell, and longer-range plug-in EVs and $1,500 for shorter-range plug-in hybrid Electric Vehicles (EVs). A population-proportional fund of $5 million for Manitoba (BC's has $27 million) would be established for this purpose. These provincial rebates would supplement the new federal Zero Emissions Vehicle (ZEV) payments of up to $5,000 for qualifying cars.[7] Efficiency Manitoba would be mandated to mount a marketing campaign to create awareness and knowledge of EVs, incentive programs, and growing charging infrastructure like Plug-In BC, Ontario's Plug 'n Drive, and Quebec's Running Electric.[8] These measures complement the Expert Advisory Council on Sustainable Development's (EAC) recommendations (i) to require builders to incorporate EV charging stations in all new residential and commercial projects (and major renovations) and (ii) to consider requiring a ZEV quota for new vehicle sales from dealers.[9]

See Budget Paper A for more.

Ramping up EV ownership will have positive economic returns for Manitoba Hydro and the Province from a massive shift in fuel purchases from Alberta gasoline and diesel to Manitoba hydroelectricity. Carbon pricing adds to the benefits for EV owners, accelerates the payback and enhances the uptake of electric vehicles leading to an earlier transition to a thriving, low-emission economy based on Manitoba's energy. Any initial costs of promotion, incentives, building out vehicle charging infrastructure, or foregone fuel tax revenues (for a 5-year ramp, followed by another form of road tax) should be regarded as investments that will pay a positive return for Manitobans (see Municipal Relations section for more), Manitoba Hydro and the provincial treasury over time. In the meantime, the carbon pollution levy can provide funds to make these investments.
New Operating Expenditure: $5 million (Efficiency Manitoba)

Rebates for Heavy-duty Truck Efficiency Retrofits:
Efficiency measures create a net benefit to the trucking sector higher than their retrofit costs and the carbon pollution levies they pay. With more efficient equipment, Manitoba truckers become more competitive in other jurisdictions too. EAC estimates an incredible $200 positive return for every tonne of GHG reduction from heavy duty vehicle efficiency.[10] The APB would continue funding this program at current levels ($5.9 million over three years, matched by federal funding from the Low Carbon Leadership fund).

Supporting Manitoba Climate Innovation and Jobs:
The APB would repurpose the existing Innovation Growth Program (IGP) to target small and medium sized enterprises, public entities including crown corporations, and social enterprises whose business models assist with greenhouse gas reductions here. The IGP currently provides a non-repayable grant of up to $100,000 to cost share the development and commercialization of innovative products or processes, on a 50/50 cost shared basis. The APB would raise the grant maximum to $350,000 and prioritize climate and job generation by tying the value of the grant and the cost-share proportions directly to greenhouse gas reductions and new jobs.

The IGP is currently funded at $2.148 million. The APB would increase the available funding to $7 million in 2020–21. Subsequent years' allocation would be subject to a review of the intake and program evaluation focusing on greenhouse gas reductions and local employment creation.

See APB chapters on Community Economic Development, Northern Development and Training and Budget Paper C for more.
New Expenditure: $4.852M

Private finance is important for energy transition, but it is not moving anywhere close to quickly enough into green and sustainable projects.[11] The public sector can have an appropriate role in helping incubate innovative private sector projects, but they need to have a demonstrable public benefit. Rather than de-risking the costs of product and process development without regard to the social benefit, the APB proposes to index the eligible grant size to the contribution of the innovation to greenhouse gas reduction, and to job creation, turning it into a Climate and Jobs Innovation Program. Job creation is currently listed as one of the selection criteria for the IGP, but the APB tightens the link and makes the value of the grant contingent on its employment effects.

The APB would also remove restrictions that currently exist in the IGP which block non-profit social enterprises, crown corporations, municipalities, towns and cities, or other organizations owned by these entities from accessing the funding. Climate emergency is an all-hands-to-the-pump situation.

See APB chapters on Community Economic Development, Northern Development and Training and Budget Paper C for more.

Additionally, existing ED&T tax credit programs like the Small Business Venture Capital Tax Credit, the Community Economic Development Tax Credit, and the Employee Share Purchase Tax Credit, designed to improve Manitoba businesses' access to equity, would be enhanced to reflect the APB's green-jobs focus. Currently, these programs offer a 45% credit to Manitoba investors in Manitoba businesses. The APB would increase this to a range from 20% to 80%, linked to local job creation and greenhouse gas reductions.

Manitoba Community Climate Fund
Modeled on California's Transformative Climate Communities program, the APB would allocate $12 million for a 3-year pilot project focusing on the development and implementation of climate mitigation projects in low-income urban, rural, and northern communities. Community-proposed projects designed to reduce GHGs and to meet other, identified needs (housing, transportation, health and safety, employment, health, skills training) would be funded on a competitive basis. Eligible to community-based organizations, local governments, nonprofit organizations, philanthropic organizations and foundations, coalitions or associations of nonprofit organizations, community development corporations, and Indigenous authorities.
New Expenditure: $4M

All projects receiving provincial government funding would be subject to provincial project labour agreements.

Total New Revenue:
Carbon levy: $300M

Total New Operating Expenditures:
Low and middle income rebates: $100M
Building retrofits: $109.2M
Skills training: $5M (Economic Development and Training)
Transportation: $46.4M
[Transit and Active Transport Infrastructure grants and Operating: $41.4M (Municipal Relations)
EV Acceleration: $5M (Efficiency Manitoba)]
IGP: $4.852M (Economic Development and Training)
Community climate fund: $4M (Economic Development and Training)
Total: $269.5M
Total New Capital Expenditure:
Interest free loan to City of Winnipeg for purchase of electric buses: $7M

1 National Institute of Building Sciences. 2018. Principal Investigator: Porter, K.; co-Principal Investigators: Scawthorn, C.; Huyck, C.; Investigators: Eguchi, R., Hu, Z.; Reeder, A; Schneider, P. *Natural Hazard Mitigation Saves: 2018 Interim Report*. Washington, DC. National Institute of Building Sciences.

2 Estimates derived from Burr, Andrew; Majersik, Cliff; Stellberg, Sarah; and Garrett-Peltier, Heidi. 2012. *Analysis of Job Creation and Energy Cost Savings From Building Energy Rating and Disclosure Policy.* Institute for Market Transformation and the Political Economy Research Institute, University of Massachusetts, Amherst. See also Environmental Defense, Blue Green Canada, and the Clean Economy Alliance. 2017. *Building an Ontario Green Jobs Strategy*.

3 Scaled from Environmental Commissioner of Ontario. 2016. Conservation: Let's Get Serious. Annual Energy Conservation Progress Report. http://docs.assets.eco.on.ca/reports/energy/2015-2016/ECO_Conservation_Lets_Get_Serious.pdf

4 Harris, K. 2019. Trudeau promises $40K interest-free loans to make homes energy efficient and safer from severe weather. CBC News. September 25. https://www.cbc.ca/news/politics/liberal-climate-change-plan-home-retrofits-1.5296400

5 American Public Transport Association. 2014. Economic Impact of Public Transportation Investment: Update. Washington, DC: APTA. https://www.apta.com/wp-content/uploads/Resources/resources/reportsandpublications/Documents/Economic-Impact-Public-Transportation-Investment-APTA.pdf

6 Hoye, B. 2018. Union asks province for $7M loan to help Winnipeg Transit buy 20 electric buses. CBC. https://www.cbc.ca/news/canada/manitoba/winnipeg-transit-electric-buses-1.4626310

7 https://www.tc.gc.ca/en/services/road/innovative-technologies/list-eligible-vehicles-under-izev-program.html

8 https://pluginbc.ca/, https://www.plugndrive.ca/ and https://www.roulonselectrique.ca/en/

9 https://www.gov.mb.ca/asset_library/en/eac/eac_carbon_savings_report2019.pdf, p. 36

10 https://www.gov.mb.ca/asset_library/en/eac/eac_carbon_savings_report2019.pdf, p. 52.

11 International Energy Agency (IEA). 2019. World Energy Investment Report. Paris: IEA. https://webstore.iea.org/world-energy-investment-2019; OECD. 2019. Financing climate objectives in cities and regions to deliver sustainable and inclusive growth. Paris: OECD.