

Green Action Centre pre-hearing submission on
Efficiency Manitoba's 3-year plan

Green Action Centre will not apply to intervene in the Efficiency Manitoba (EM) hearing. We will rely on other parties pursuing shared issues of concern in their interventions and may participate by way of a presentation later. However, we wish to monitor the proceedings and ask that the email distribution list retains Peter Miller (p.miller@mymts.net) as a contact for Green Action Centre.

We wish also to comment on the scope of the hearing. While a core requirement of the hearing is to review EM's Manitoba Hydro funded 3-year plan cost-effectively to reduce electrical and natural gas usage by prescribed amounts, other expectations and potential activities of EM cannot be ignored.

This process is the first judicial review of a plan from Efficiency Manitoba. Previously, Power Smart efficiency plans were reviewed as part of a Manitoba Hydro application under the Hydro mandate "to promote economy and efficiency in the development, generation, transmission, distribution, supply and **end-use** of power." That mandate has not been rescinded, but, under the Efficiency Manitoba Act, Manitoba Hydro is required to outsource the execution of its responsibility for economical and efficient end-use of power to Efficiency Manitoba. In addition, Efficiency Manitoba was created with the expectation that it will be a significant instrument in meeting the provincial objective to reduce GHG production and use of fossil fuels in Manitoba to address climate change, as is evident from throne speeches, Manitoba's Climate and Green Plan, the contingent EM mandate to reduce fossil fuel in transportation, the prohibition against using replacement fossil fuels to achieve efficiencies, the tracking of GHG reductions in evaluating the performance of EM, and the permission and empowerment of EM to contract to reduce other fossil fuels in Manitoba even if they are not a mandated part of its plan. Indeed, before this process is over, EM could potentially contract to engage in delivering other programs that will operate alongside the narrower Hydro-funded efficiency plan.

Given that the plan under PUB review is only a portion of EM's potential activities, it is important that efficiency plan activities work synergistically rather than antagonistically with other potential activities in the public interest. A special concern that requires clarification is methodological provisions that beneficial electrification initiatives by Efficiency Manitoba to induce the substitution of electric propulsion for fossil fuel propulsion in Manitoba shall not count against EM's electrical savings targets.

We thus reject the notion that items like the following should be outside the scope of PUB inquiry: expectations from the Climate and Green Plan and other relevant policy documents and the other contingent mandates in Section 4 (d) to reduce electrical demand, potable water consumption, and fossil fuels used in transportation, particularly through the electrification of transportation.

Please see the attached "Considerations for including electrification of transportation within scope" for an elaboration of these points.

Respectfully submitted on behalf of Green Action Centre

Peter Miller – p.miller@mymts.net

Considerations for including electrification of transportation within scope of the EM Review **Green Action Centre 2019-09-23**

Policy context

Federal – June 17, 2019 Parliamentary declaration of a national climate emergency + supporting reports. The Government of Canada has set Canada-wide targets for the sale of Zero Emission Vehicles (ZEV) of 10% by 2025, 30% by 2030, and 100% by 2040 and provided a first come, first served incentive of \$5,000 for purchase of a new BEV.

Provincial - Manitoba's Climate and Green Plan (CGP) declares that "Manitoba will be the cleanest, greenest, most climate-resilient Province in Canada." Note: Manitoba's GHG emissions are 6th highest per capita and 5th highest per million dollars of GDP among the provinces. Moreover, Manitoba's GHG emissions are 1.7 times Quebec's per person, and 1.6 times Quebec's per million dollars of GDP. The largest proportion of Manitoba's emissions - 39% - arise from the transportation sector. CGP also recognizes: "One of the greatest opportunities for reducing transportation emissions is through electrification. Manitoba is an ideal place for the adoption of electric vehicles that plug-in to the electricity grid and obtain energy for motive operation." Government's post-election mandate letter says, "97. Mandate the Climate and Green Plan Expert Advisory Committee to investigate and provide recommendations to electrify Manitoba's transportation infrastructure."

The practical question remains, how can that transition be accelerated to realize the opportunity we have? Efficiency Manitoba, as heir to Power Smart capabilities for market transformation for new technologies (e.g. high-efficiency furnaces and LED lighting), is particularly well-suited to transform the EV market. (See attached chart *The Future of Mobility is Arriving Early* for anticipated trend.)

Economic benefits

Switching from gasoline and diesel to electricity to fuel transportation would switch fuel expenditures from Alberta to Manitoba to the benefit of MH and the provincial treasury. As a transportation fuel, electricity would be sold at retail rates in Manitoba (vs. alternative of opportunity export prices) and still save customers on fuel costs. Retail electricity sales also attract PST and a Winnipeg sales tax. If EV owners were charged the equivalent of the fuel excise tax (14 cents/litre), governments would come out ahead in revenue.

With no EV marketing and promotion in Manitoba, sales lag BC and QC. The federal incentive will go mostly to the provinces that promote EVs rather than MB. (See attached WFP article *Electric car sales climb....*)

Energy efficiency benefits

On an energy equivalency basis, EVs consume less energy than the ICE vehicles they replace.

Legal context

The *Efficiency Manitoba Act* contemplates that EM will have a role in reducing provincial GHGs. The definition of "demand-side management initiative" includes fuel switching, unless "the switch increases greenhouse gas emissions in Manitoba." Subsection 4(1)(a) includes a mandate to implement DSM initiatives to meet savings targets and achieve resulting GHG reductions. Subsection 4(1)(d) provides a conditional mandate that "if any of the following are prescribed as being subject to demand-side management under this Act, [the agency shall] carry out the prescribed duties in respect of them" including "(iii) fossil fuels consumed in the transportation sector in Manitoba." In this regard, subsection

6(3)(b) includes the power for Efficiency Manitoba to “undertake prescribed activities related to efficiency, conservation or the reduction of greenhouse gas emissions in Manitoba.” Subsection 4(3)(a) provides that Efficiency Manitoba may “specifically target, where appropriate, particular fuel choices.” Targeting electricity to replace gasoline and diesel in transportation is an obvious example.

Finally note that section 9 prescribes that efficiency plans shall include the following.

:

(c) a description of any initiatives proposed in addition to those proposed to meet the savings targets [which could be beneficial electrification initiatives to reduce GHGs],

:

(e) an analysis of the reductions in greenhouse gas emissions in Manitoba expected to result from the initiatives under clauses (a) to (d); and

:

(g) an assessment of the benefits to be attained if the initiatives proposed under clauses (a) to (d) are implemented during the three-year period, including benefits to be experienced by

(i) those who participate in any of the initiatives,

(ii) Manitoba Hydro, and

(iii) Manitobans generally, including any environmental benefits, economic development opportunities, and enhancements to energy security.

Review and recommendation by PUB

11(1) The PUB must review an efficiency plan and make a report, with recommendations, to the minister as to whether the plan should be

(a) approved;

(b) approved with suggested amendments; or

(c) rejected.

The *Efficiency Manitoba Regulation* says the following.

Fossil fuels other than natural gas

6 Efficiency Manitoba may undertake initiatives to reduce the consumption of fossil fuels other than natural gas in Manitoba, but unless those initiatives qualify for the use of the Affordable Energy Fund under section 14, they are not to be funded under an efficiency plan and Part 3 of the Act does not apply to them.

OTHER CONSIDERATIONS

1. PUB Review of an EM Efficiency Plan occurs every 3 years, so this review is the only window for including an electrification strategy before 2023, a set-back of four years from the introduction of the federal incentive and even more years from the introduction of provincial incentives and EV marketing campaigns in BC and QC.
2. Such a delay is costly to Manitoba.
 - Most urgent is the short timeline to 2030 for major GHG reductions.
 - Postponement negates the Climate and Green Plan Vision that “Manitoba will be Canada’s cleanest, greenest and most climate resilient province.”
 - Cumulative emissions accounting underlying Manitoba’s Carbon Savings Account means that additional GHGs accumulate in the atmosphere when savings opportunities are postponed.
 - With EV adoption a net benefit to Manitoba Hydro and its customers and the provincial economy and treasury, postponement means an economic loss to Manitobans.

- Without augmentation from a marketing campaign in Manitoba, fewer federal EV rebates will accrue to Manitobans vs. other provinces.
 - Continuation in the laggard position is also a loss to Manitoba innovation and branding.
3. Manitoba has conducted extensive EV research, but its Drive Electric website (<http://www.driveelectricmanitoba.ca/>) has no new information since 2012 and thus no coverage of better-performing current-generation EVs. Nor can one learn of the availability of a federal incentive for the purchase of an EV.
 4. Manitoba Hydro's EV page (https://www.hydro.mb.ca/your_home/electric_vehicles/) likewise lacks information on available models and incentives, but it does link to an external CAA website, which in turn links to that information.
 5. Manitoba's Expert Advisory Council report to the Minister of Sustainable Development (June 2019 - https://www.gov.mb.ca/asset_library/en/eac/eac_carbon_savings_report2019.pdf) makes no mention of the May 1, 2019 federal EV incentives nor of the importance of a marketing program to accompany available EV incentives and opportunities. Moreover, EAC received divergent information on the effectiveness and cost-effectiveness of EV incentive programs (see attached chart *Evaluation of Potential Mitigation Opportunities – Effectiveness and Efficiency*). And they did not have a business case for transport electrification from Manitoba Hydro to consider.

Conclusion

Climate action is urgent. Federal and provincial policies point to transportation electrification as a key measure. Efficiency Manitoba is uniquely positioned to catalyze that transformation. The Efficiency Manitoba Act allows for and conditionally mandates such a role. A PUB review is a timely opportunity to produce a critically vetted evidentiary basis for recommendation and decision.

If an evaluation of EV promotion is ruled out of scope for the evaluation of the current 3-year EM Efficiency Plan, questions remain for clarification and recommendation through the PUB review.

1. The EM Regulation states

6 Efficiency Manitoba may undertake initiatives to reduce the consumption of fossil fuels other than natural gas in Manitoba, but unless those initiatives qualify for the use of the Affordable Energy Fund under section 14, they are not to be funded under an efficiency plan and Part 3 of the Act does not apply to them.

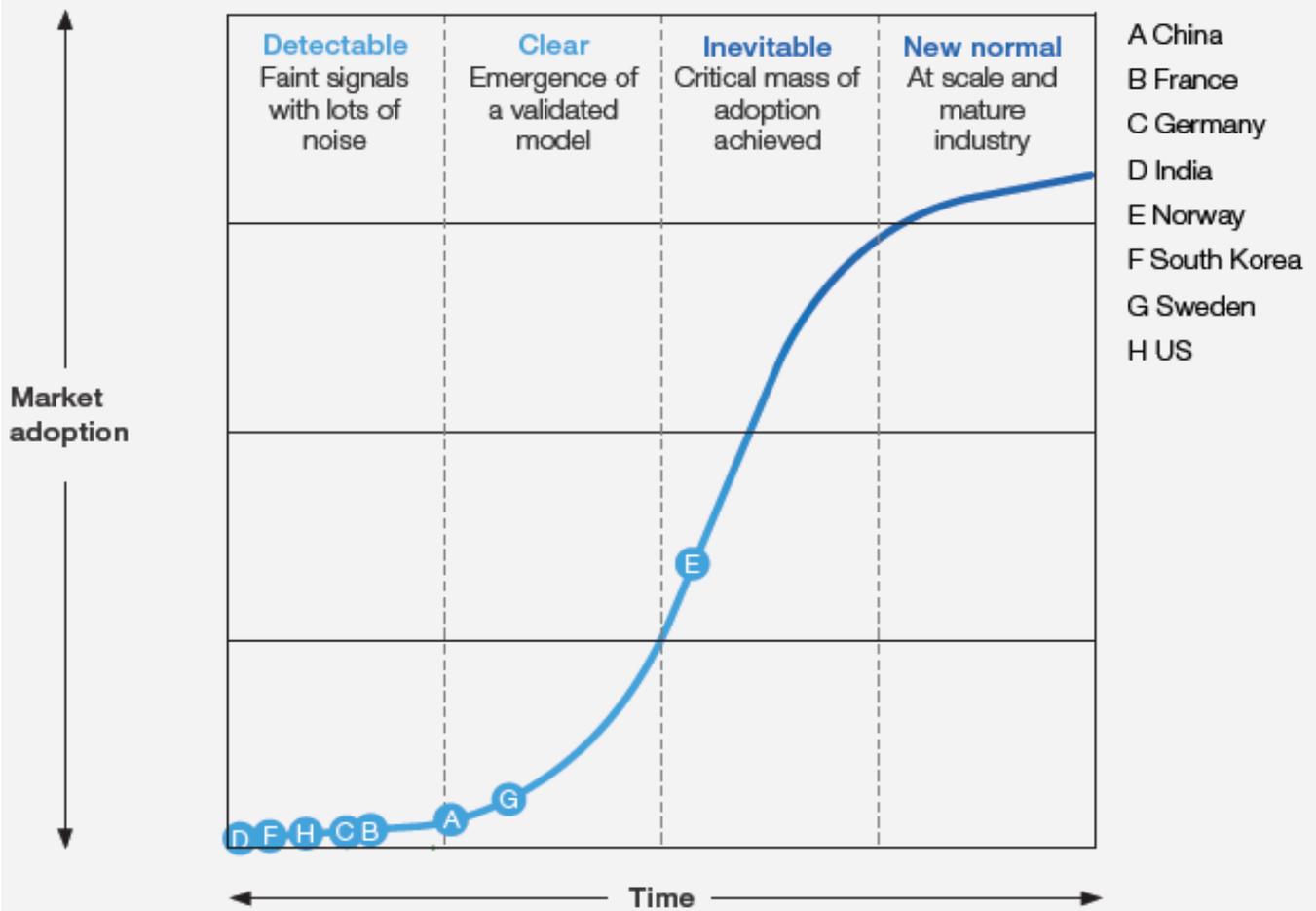
What are the anticipated circumstances and timeframe in which this permission could or would be exercised? For example, if Manitoba Hydro determines that there is a business case for the promotion of EVs, can it contract with EM to assist in that promotion?

2. Electrification of transportation is an example of *beneficial or strategic electrification*, which increases electrical usage to attain benefits like emissions reduction, overall energy efficiency, or economic benefits for MH, its customers and the Province. Promoting other economic opportunities taking advantage of Manitoba's Hydro resource are also examples.

How should EM's mandated reduction targets be reconciled with a socially beneficial program of strategic electrification so as not to provide a disincentive to such efforts?

The Future of Mobility is Arriving Early

The 4 stages of a disruptive trend — focus on electric-vehicle market adoption



Source: Chris Bradley, Martin Hirt, and Sven Smit, Strategy Beyond the Hockey Stick, McKinsey, 2018

p. 9 of <https://www.mckinsey.com/~media/McKinsey/Industries/Automotive%20and%20Assembly/Our%20Insights/Reserve%20a%20seat%20the%20future%20of%20mobility%20is%20arriving%20early/Reserve-a-seat-The-future-of-mobility-is-arriving-early.ashx>

<https://www.winnipegfreepress.com/arts-and-life/life/greenpage/electric-car-sales-climb-in-wake-of-new-5000-federal-rebate-program-523613581.html>

Electric car sales climb in wake of new \$5,000 federal rebate program

By: Mia Rabson, The Canadian Press

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OTTAWA - Canada's new rebate program to help make electric cars cheaper appears to be showing early signs of stimulating sales but mostly in the two provinces that require a minimum number of electric car sales.

On May 1, Ottawa began offering rebates of up to \$5,000 on the purchase of some electric vehicles in a bid to bring the cost of lower-end models closer to that of their gas-powered cousins.



A car is charged at a charge station for electric vehicles on Parliament Hill in Ottawa on Wednesday, May 1, 2019. Transport Canada data shows more than 14,000 electric vehicles were purchased in Canada during the first three months of the federal government's new rebate program. THE CANADIAN PRESS/Sean Kilpatrick

Announced in the March budget, the incentives are part of Ottawa's goal to increase sales of electric cars to 10 per cent of all vehicles sold by 2025, 30 per cent by 2030 and 100 per cent by 2040.

Last year, electric and plug-in hybrids accounted for about two per cent of total vehicle sales.

Matthew Klippenstein, an engineer who began tracking electric vehicle sales a few years ago on his website Canada EV Sales, said they accounted for four per cent of all vehicle sales in May and June.

It's still a tiny share — the Ford F-series pickup trucks alone accounted for seven per cent of all vehicle sales — but it is rising. And Klippenstein said the federal rebate "has definitely increased sales in the past couple of months."

Transport Canada reports that more than 14,000 electric cars and minivans were bought nationwide using the rebate since May 1. The department, which is overseeing the rebate program, also said overall electric vehicle sales were up 30 per cent between January and June, compared to the year before.

But Klippenstein said there is one caveat to the data. More than eight in 10 of the electric vehicles sold in May and June, were sold in British Columbia and Quebec. Those are the only two provinces that have a provincial rebate — Ontario did until last year when Premier Doug Ford cancelled it after being elected — and both allow their rebate to be combined with the federal one for even greater savings.

Even more important to the sales distribution is that both B.C. and Quebec require dealerships to sell a certain percentage of electric cars, Klippenstein said. If they don't meet the quotas they have to either pay a fine or buy credits from competitors who exceeded their quotas.

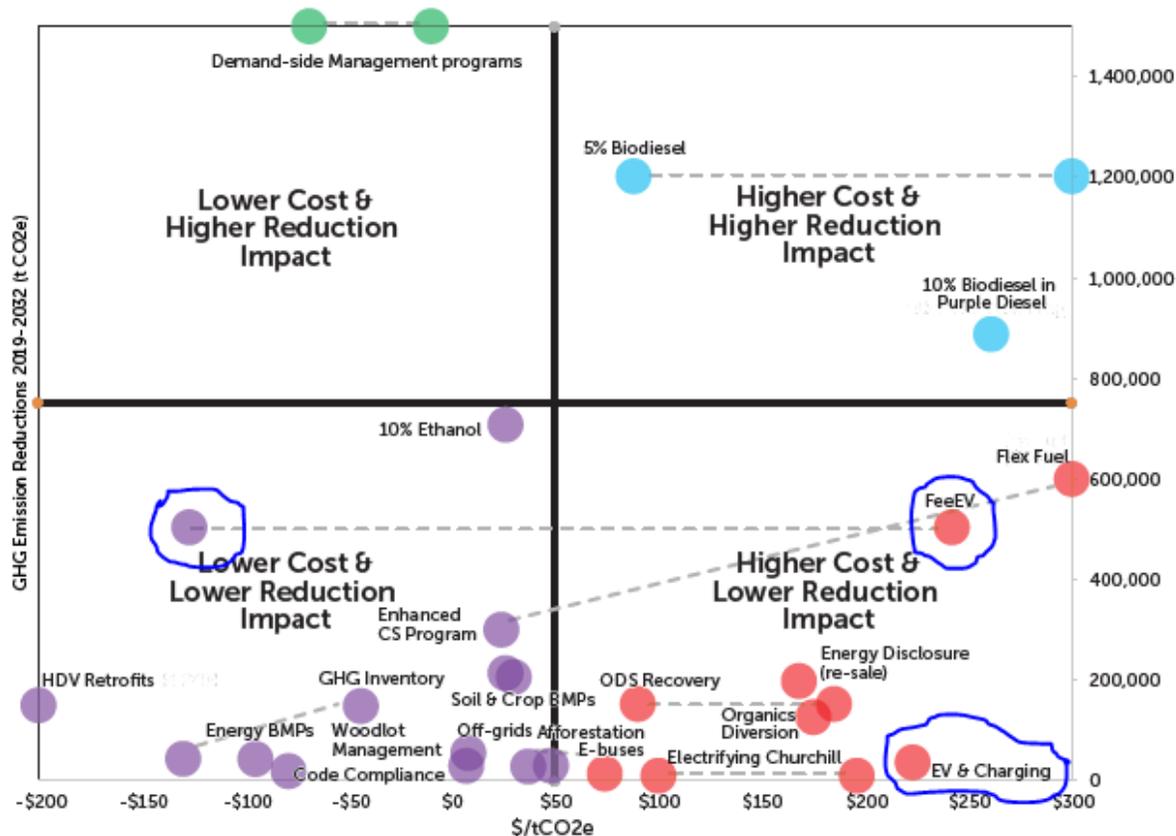
Klippenstein said there is still a limited supply of electric cars and those the automakers are sending to Canada are going to B.C. and Quebec first to make sure dealerships hit their quotas.

Dan Woynillowicz, policy director at Clean Energy Canada, said there is still work to do to install public charging stations in the provinces that have never had a rebate. The lack of that infrastructure is contributing to lower sales there.

Transport Canada hasn't yet been able to provide further details about what kinds of cars were the most popular purchases or sales numbers by province.

The federal rebates are available for fully electric vehicles whose lowest-end model retails for less than \$45,000, or \$55,000 for vehicles that have seven or more seats like minivans. Up to \$5,000 is available, with fully electric vehicles bought outright or leased for at least four years eligible for the maximum. Shorter-range plug-in hybrids or fully electric cars leased for shorter times are eligible for rebates between \$625 and \$3,750 depending on the length of the lease and the type of vehicle.

Evaluation of Potential Mitigation Opportunities - Effectiveness and Efficiency



Data Source: Sector Working Groups, 2019

Potential mitigation opportunities are plotted in four categories based on the evaluation framework effectiveness and efficiency criteria results. Each category is plotted in quadrants that are colour-coded. Potential initiatives with lower costs on a cost per tonne of emissions reduced basis (more efficient) are plotted in the left quadrants. Potential initiatives with a higher reduction impact in terms of cumulative GHG emissions reductions over the 2019 to 2032 period (more effective) are plotted in the top quadrants. Grey dotted lines between potential initiatives represent the range of results, depending on the assumptions considered in the evaluation framework assessment.