

**Written Submission for the Pre-Budget Consultations in  
Advance of the 2021 Federal Budget**

**Submitted by:  
MTB Transit Solutions**

**August 2020**

## **RECOMMENDATIONS**

**Recommendation 1:** That the government allocate new and additional funding for transit agencies seeking to make capital expenditures on bus refurbishment and diesel to electric bus conversion.

**Recommendation 2:** That the government create funding envelopes specific to the conversion of diesel buses to electric for municipal transit agencies to access.

**Recommendation 3:** That the government set an ambitious target of converting a significant percentage of Canada's existing diesel buses to electric by 2030.

## **Overview of ZEV Clean Power**

The transition to Zero Emissions Vehicles (ZEV) in public transit should be an important consideration for the federal government in the development of the upcoming federal budget. As transit agencies grapple with greater pressure on operating budgets as a result of the COVID-19 pandemic and reduced ridership revenues, ZEV Clean Power is a solution that can help transit agencies maximize on their existing fleet of buses.

ZEV Clean Power is achieved through a 3-step process. First, the bus is refurbished to repair and replace existing parts as a result of corrosion and normal structural wear and tear. The diesel components, such as the engine, fuel tanks, and transmission are then removed. At the final stage of the process, the bus is repowered with new, Canadian-made, ZEV Clean Power components such as electric HVAC, an electric motor, and battery packs and cooling.

## **The Cost of ZEV Clean Power**

Converting to ZEV Clean Power comes with several economic benefits and cost savings to transit agencies. The cost to convert a diesel bus to electric is approximately \$500,000, which is 50% the cost of a new electric bus. The cost savings are further seen through the extension of bus life and the lower operating costs. ZEV Clean Power buses are 41% cheaper to operate than diesel and extends the life of the bus by 50%. With transit agencies under strain as a result of COVID-19, the economic benefits of converting to ZEV Clean Power are even more relevant for the development of the upcoming budget. Budgetary allocations toward capital expenditures at transit agencies can go further as the cost of converting a bus to ZEV Clean Power requires 50% less capital up front. Capital expenditure on the conversion from diesel to electric with ZEV Clean Power will also be covered by the reduction in operating costs over the remaining life of the converted bus. The long-term benefit of cheaper overall operating costs through lower fuel and maintenance costs also means that the pressure on operating budgets at transit agencies is lessened over time.

## **ZEV Clean Power and the Environmental Benefit**

A major benefit of ZEV Clean Power is the move towards transit options that are better for the environment. As government considers budgetary allocations, investment in ZEV Clean Power transit also has the added benefit of investing towards Canada's 2030 emissions reduction goal. Through refurbishment and better longevity, fewer buses are prematurely sent to landfill. Once converted to electric, buses produce zero tailpipe emissions. This benefit should be an important consideration in the upcoming budget as federal investment for transit agencies converting to zero-emission propulsion will also contribute to government's overall environmental targets.

## **Extending Bus Life through Refurbishment and ZEV Clean Power**

All diesel buses will require mid-life refurbishment due to regular wear-and-tear and corrosion over time. Refurbishment of a diesel bus can be done standalone for transit agencies that currently do not have the infrastructure for electric conversion but want to further extend the life of their bus fleet. Properly executed mid-life bus refurbishment

comes with major cost-saving and environmental benefits as well. Refurbishment is 1/4 to 1/3 the cost of a new diesel bus, ensures fewer buses are prematurely sent to landfill, and is an effective solution for transit agencies to extend an aging bus fleet while also maximizing on capital.

As part of transitioning a bus from diesel to electric through the ZEV Clean Power process, a bus goes through mid-life refurbishment on top of having its diesel parts replaced with new, electric components. Through the process of transitioning a bus from diesel through the ZEV Clean Power process, the life of a bus is extended from 12 years to 18 years. The added lifespan of a bus is an important benefit since transit agencies will now require more buses in operation to ensure physical distancing for their ridership. As transit agencies look to solve this issue, the benefit of extending bus life should be an important consideration for the federal government. Through budgetary allocations specifically geared towards converting diesel buses to electric, government can be a meaningful partner to transit agencies looking to maximize on their existing fleet of buses.

### **About MTB Transit Solutions**

MTB Transit Solutions is a long-time leader in the transit industry with over 45 years' experience. Located in Milton, Ontario, MTB has the largest state of the art independent bus facility in Canada. MTB employs over 55 skilled workers including mechanics, welders, and expert technicians in the industry. Completing work on over 5,000 buses, MTB services some of the largest transit agencies in the country such as Metrolinx, Brampton Transit, and Saskatoon Transit. MTB Transit Solutions is ISO9001:2015 certified and takes pride in ensuring that all equipment and tooling meets all federal, provincial, and municipal government certifications and standards.