

# Cost Estimate of Election Campaign Proposal

Publication date:	2019-09-29											
Short title:	Rebate for Used Zero-Emission Vehicles											
Description:	<p>Introducing a rebate for used zero-emission vehicles (ZEVs) of up to \$2,000. This policy will provide a 10% refundable rebate on the purchase price of a used ZEV, up to a maximum rebate of \$2,000. Qualifying ZEVs will include all Battery Electric Vehicles (BEVs) and Plug-in Hybrid Electric Vehicles (PHEVs) purchased before 2019 for personal and commercial use. This rebate will be implemented effective January 1, 2020 and will run until December 31, 2025. It does not apply retroactively. The incentive is available once per vehicle and applies to used cars sold for the first-time only.</p>											
Operating line(s):	Other Transfer Payments											
Data sources:	<table border="0"> <thead> <tr> <th><u>Variable</u></th> <th><u>Source</u></th> </tr> </thead> <tbody> <tr> <td>Car Sales</td> <td>Fleetcarma</td> </tr> <tr> <td>Car Prices</td> <td>Autotrader</td> </tr> <tr> <td>Average Length of Ownership</td> <td>Power Information Network</td> </tr> <tr> <td>Age of Used Cars</td> <td>Edmunds</td> </tr> </tbody> </table>	<u>Variable</u>	<u>Source</u>	Car Sales	Fleetcarma	Car Prices	Autotrader	Average Length of Ownership	Power Information Network	Age of Used Cars	Edmunds	
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Car Sales	Fleetcarma											
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Estimation and projection method:	<p>PBO gathered data on the number and age of eligible used vehicles currently in the market. Due to limited information regarding the number of times ZEVs are resold, the probability that a vehicle would be resold was estimated by imputing a normal distribution with the assumption that new vehicle owners keep their ZEVs 6.37 years on average before selling.</p> <p>PBO created a database from an online used car market to estimate current prices and depreciation rates for popular ZEV models. The number of used ZEVs sold per model was calculated based on a sample of new cars sales and scaled to reflect the total number of ZEVs eligible for the rebate. The rebate per ZEV model was estimated based on PBO's estimates of depreciated prices. The cost of extending the policy was calculated as the sum of the rebate per car multiplied by the number of used ZEVs on a cohort basis.</p>											
Uncertainty assessment:	<p>The estimate has moderate uncertainty. No behavioural responses from sellers were included, and a limited behavioural response is expected. A normal distribution was assumed with respect to length of car ownership. Asking prices for the vehicles may not be reflective of the actual selling prices by model, and only reflect prices on one site for one given day. The distribution of used cars by age were based on US vehicle data. Administrative costs were not considered.</p>											

### Cost of proposed measure

\$ millions	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029
Total cost	6	22	17	8	4	2	-	-	-	-

Notes:

Estimates are presented on an accruals basis as would appear in the budget and public accounts.

Positive numbers subtract from the budgetary balance, negative numbers contribute to the budget balance.

"-" = PBO does not expect a financial cost