

B.C. Zero-Emission Vehicles Act & Regulation Guidance Document

Table of Contents

1. Context
2. General Guidance
2.1 Who is regulated?
2.2 What kind of vehicles are being regulated?4
2.3 What are the compliance and reporting dates?4
2.4 How is model year defined?6
2.5 ZEV Types
2.6 ZEV Classes
2.7 Supply of ZEVs and Compliance Ratios7
2.8 ZEV Credits for vehicles
2.9 ZEV Credits from Initiative Agreements
2.10 ZEV Credits from Purchase Agreements14
2.11 Transfers of ZEV Credits
2.12 Applying for Credits and Validation in the ZEV Reporting System
2.13 Non-compliance – Automatic and discretionary administrative penalties and Offences15
3. Additional Questions & Feedback
Appendix A – Summary of Changes to the ZEV Act and Regulation
Appendix B – Worked Examples
Example 1 - MY2020 compliance achieved for a large volume supplier
Example 2A - MY2020 non-compliance & grace year for a large volume supplier
Example 2B - Alternate Scenario – MY2020 and MY2021 non-compliance & grace year for a large volume supplier
Example 2C - Alternate Scenario – MY2020 and MY2021 non-compliance & grace year for a large volume supplier
Example 3 - "Grace Year" (ZEV Act – sec. 10 Supply of ZEVs) (prior to the shift to one credit per vehicle)

Version 2: July 30, 2024



This document provides an overview of B.C.'s Zero-Emission Vehicles (ZEV) Act and Regulation. The information in this document is for convenience and guidance only and does neither replace nor constitute legal advice. Links to the ZEV Act and Regulation are located on the B.C. Ministry of Energy, Mines and Low Carbon Innovation's Clean Transportation <u>ZEV</u> Act website.

Original Guidance Document (Version 1) June 21, 2021 Revised Guidance Document (Version 2): July 30, 2024

This updated guidance document (version 2) incorporates the changes to the ZEV Act and Regulation that came into effect upon Royal Assent of the ZEV Act (November 30, 2023) and deposit of the regulation (July 6, 2024). The body of this guidance document also includes information about all the changes that come into force for October 1, 2024, which includes changes in relation to the 2026 model year and that begin October 1, 2026. For a summary of the changes see Appendix A.

1. Context

The Province of British Columbia (Province) fulfilled a <u>CleanBC</u> commitment when it passed the ZEV Act and Regulation (May 30, 2019, and July 30, 2020, respectively). The original ZEV Act established ZEV sales targets reaching 10% of light-duty vehicle sales by 2025, 30% by 2030, and 100% by 2040. Amendments were made to the ZEV Act on November 30, 2023, and to the ZEV Regulation on July 6, 2024. These amendments were based on the first formal review of the ZEV Act and implement the new sales targets committed to in the <u>CleanBC Roadmap to 2030</u>. The amendments to the ZEV Act accelerated the ZEV sales targets to 26% of light-duty and Class 2B¹ vehicles by 2026, 90% by 2030 and 100% by 2035. This means that all new light-duty and Class 2B motor vehicle sales must be ZEV on and after January 1, 2035 (i.e. no sales of new internal combustion engine (ICE) light-duty and Class 2B vehicles in British Columbia (B.C.).

The ZEV Act and Regulation is intended to ensure a greater availability of ZEVs at more affordable prices in B.C., as well as provide a regulatory backstop to ensure the Province's GHG reduction targets are met. B.C. has joined a growing number of jurisdictions with ZEV standards, including Quebec, California, and other U.S. states, but has the distinction of being the first jurisdiction in the world to legislate a 100% ZEV target.

2. General Guidance

Table 1 provides an overview of how the sections of the ZEV Act and Regulation work together.

¹ The term 'Class 2B' is not used in the ZEV Act or Regulation but is a common term to refer to vehicles with a gross vehicle weight rating over 3,856 kg and less than 4,537 kg, which are the new weight of vehicles that are being captured in B.C.'s ZEV mandate.



Table 1: ZEV Act & Regulation – Overview of Sections				
ZEV Act	ZEV Regulation			
Part 1 – Introductory provisions outlining key definitions and the classification of motor vehicles and ZEV units.	Sec 1-6.3, 8, 9 – establishes definitions, compliance date, prescribed vehicle classes and classes of ZEVs, classes of suppliers, and prescribed class of suppliers.			
Part 2 – Overarching provincial targets of 26% by 2026, 90% by 2030, 100% by 2035 for light-duty and Class 2B vehicles, public reporting, and the prohibition date for the sale of non-ZEVs.	N/A			
Part 3 – Compliance rules, different ways to meet the requirements, and reporting rules.	Sec 10-16.3 – Establishes rules regarding supply of ZEVs and ZEV units, including compliance ratios and credit calculations (both before October 1, 2026, and after), reduction of supplier balances with the change to one credit per vehicle, issuance of credits under initiative agreements and purchase agreements and reporting requirements.			
Part 4 – Inspections and enforcement, including administrative penalties and offenses.	Sec 17-25 – Establishes rules regarding administrative penalties.			
Part 5 – Provides for appeals to the Environmental Appeal Board.	N/A			
Part 6 – General provisions, including all the regulatory making powers.	N/A			
Part 7 – Transitional and commencement provisions.	N/A			

2.1 Who is regulated?

Vehicle manufacturers (i.e., suppliers) are regulated. The ZEV Act identifies that a person is a supplier of a vehicle make if that person supplies motor vehicles for consumer sale (which means retail sale or retail lease) in B.C. by the person or by another person. A supplier is the major, overarching supplier of vehicles including brands under that supplier.

Section 8 of the Regulation identifies three classes of suppliers based on average supply volumes in B.C.:

- Large volume supplier: at least 5,000 sales
- Medium volume supplier: at least 1,000 and less than 5,000 sales
- Small volume supplier: less than 1,000 sales

Average supply volume is defined in section 8 of the Regulation and is based on average annual supply of light-duty (and Class 2B beginning October 1, 2024) motor vehicles in B.C. of the previous 3 model years (e.g. for MY2023, it is an average of MY2020, MY2021, MY2022 sales). For the purposes of determining average supply volume, motor vehicles supplied before October 1, 2024, that have a gross vehicle weight rating of more than 3,856 kg (Class 2B



vehicles) are not to be counted. This is because Class 2B vehicles are only captured within the ZEV mandate for vehicles sold beginning October 1, 2024 (with the exception that suppliers can apply for credits for MY2024 or later Class 2B vehicle sold prior to October 1, 2024).

Note: Prior to October 1, 2024, classes of suppliers were based on total sales volume (see Guidance Document Version 1).

Section 9 of the Regulation identifies the "small" class of suppliers as the class of suppliers for which certain sections of the ZEV Act (as identified in the ZEV Act section 5) do not apply, unless suppliers opt-in.

2.2 What kind of vehicles are being regulated?

The ZEV Act and Regulation regulate new, light duty vehicles with a gross vehicle weight rating² (GVWR) of 3,856 kg or below. Beginning October 1, 2024, the ZEV Act and Regulation will also regulate new Class 2B vehicles. This will capture vehicles with a gross vehicle weight rating of 4,536 kg or less. Suppliers can apply for ZEV credits earned for Class 2B vehicles sold before October 1, 2024 if they are a MY 2024 or later Class 2B vehicle.

Motorcycles, golf carts, implements of husbandry, industrial utility vehicles, all-terrain vehicles, off-road side-by-side vehicles, and snowmobiles, and neighbourhood zero-emission vehicles are excluded.

While other vehicle classes are not being regulated at this time, the sale or lease of medium and heavy-duty ZEVs (Class 3 - 8) is eligible for ZEV credits under Initiative Agreements (see section 2.9 of this document for more information).

2.3 What are the compliance and reporting dates?

Compliance requirements begin for model year 2020 (MY2020). Compliance under the ZEV Act will be assessed each year on the same date. Section 2 of the Regulation prescribes the compliance date as September 30 of the calendar year following the indicated year of the model year (e.g. September 30, 2021, for MY2020). This is the date that the supplier's credit balance (ZEV credits issued) will be reduced by the model year supply requirement.

Under Section 17 of the ZEV Act, a model year report is due within a prescribed number of days after the compliance date. Section 16.1 of the Regulation identifies that the model year report

² The definition of gross vehicle weight rating in the ZEV Act mirrors the definition used in the *Motor Vehicle Act*, which has slightly different wording than what is used in the On-Road Vehicle and Engine Emission Regulations but has the same intended meaning.



is due within twenty days after the compliance date for a model year (e.g. the reporting date for MY2023 vehicle sales is October 20, 2024).

As per Section 18.1 of the ZEV Act and Section 16.3 of the ZEV Regulation, as of October 1, 2024, suppliers are required to submit a forecast report with their model year report. The forecast report must include the following information for the next three compliance years:

- For each vehicle make that the supplier supplies, for each vehicle model:
 - a) the number of new ZEVs anticipated to be supplied for each model year
 - b) the ZEV class
 - c) whether the ZEV is a BEV, EREV, FCEV or PHEV
 - d) the anticipated range of the vehicle
 - e) The interior volume of the vehicle (in cubic feet)
- The number of non-ZEV motor vehicles that are anticipated to be supplied in each model year.

For the first year this means suppliers must submit their first forecast report with their 2023 model year report and include forecast information for model years 2024, 2025 and 2026.

The Act (section 18) and the Regulation (section 16.2) also identify that a supplementary report must be submitted within 30 days after the supplier becomes aware of an error or a change of information in a previous model year report. Supplementary reports will be provided in the same form and manner as a model year report.

As per Part 2 of the Act, the Province is required to publish a Provincial progress-to-targets report by April 30 each year for the preceding calendar year.

Table 2: Summary of ZEV Act & Regulation Compliance and Reporting Dates					
Date Requirement Reporting Entity Provision					
April 30 (for previous calendar year)	Provincial ZEV Targets Report	Province	Act, s. 8		
September 30 (e.g. 2024 for MY2023)	Compliance date	Suppliers	Reg, s. 2		
October 20 (e.g. 2024 for MY2023)	Model Year Report due	Suppliers	Act, s. 17		
October 20 (with the Model Year Report)	Forecast Report due	Suppliers	Act, s. 18.1		
Within 30 days of becoming aware of error/omission/change of information	Supplementary Report	Suppliers	Act, s. 18		



On receipt of Model Year report	Assessment by director	Province	Act, s. 19, 20
---------------------------------	------------------------	----------	----------------

2.4 How is model year defined?

Compliance under the ZEV Act is based on model year. Section 1 of the ZEV Act provides for the definition of model year to be prescribed by regulation. The Regulation (section 3) defines model year using the standard definition from the federal *On-Road Vehicle and Engine Emission Regulations*.

2.5 ZEV Types

Section 1 of the ZEV Act defines a ZEV as a motor vehicle that is propelled by electricity or hydrogen from an external source and emits no GHGs at least some of the time. As of October 1, 2024, the Regulation (section 1) further categorizes ZEVs into four ZEV types:

- Battery electric vehicles (BEVs)
- Extended range electric vehicles (EREVs)
- Fuel cell electric vehicles (FCEVs)
- Plug-in hybrid electric vehicles (PHEVs)

2.6 ZEV Classes

The purpose of establishing ZEV classes within the ZEV Act and the Regulation is to be able to distinguish ZEV unit requirements (through compliance ratios) for different ZEV classes. There are three ZEV classes established in the Regulation (section 6). They are ZEV Class A, B, and C. ZEV credits are only issued for Class A and B ZEVs. ZEV Class Cs cannot be issued ZEV credits.

Sections 6.1 through 6.3 of the Regulation establish which ZEV types fall into which ZEV class, for model year 2019 to 2025 (see table 3) and for model year 2026-2035 (see table 4).

Table 3: ZEV Types and ZEV Classes Assigned – MY2019-2025				
Class A Class B Class C				
BEVs with a range ≥ 80.47km	PHEVs with a range ≥16km	All other ZEVs, i.e.		
EREVs with a range ≥ 121km	EREVs with a range ≥16km but	BEVs and FCEVs with a		
	<121km	range <80.47km and		
FCEVs with a range ≥ 80.47km		PHEVs and EREVs with		
		a range <16 km		



Table 4: ZEV Types and ZEV Classes Assigned – MY2026-2035				
Class A	Class B	Class C		
BEVs with a range ≥241km	EREVs with a range ≥80km	BEVs with a range <241km		
FCEVs with a range ≥241km	PHEVs with a range ≥55km	EREVs with a range <80km		
	for model year 2026	FCEVs with a range <241km		
	PHEVs with a range ≥65km	PHEVs with a range <55km for model		
	for model year 2027	year 2026		
	PHEVs with a range ≥80km	PHEVs with a range <65km for model		
	for model year 2028 and	year 2027		
	later	PHEVs with a range <80km for model		
		year 2028 and later		

All ZEV credits have a vehicle class, ZEV class, and model year attached to them. For example, a validated sale of a MY2023 BEV would receive reportable motor vehicle ZEV Class A MY2023 credits.

2.7 Supply of ZEVs and Compliance Ratios

In order to meet the ZEV sales targets that it identifies, the ZEV Act establishes a ZEV unit system in which suppliers must earn ZEV credits (positive ZEV units) for a model year equal to or greater than the ZEV units that will be deducted (as established by the formula in section 11 of the ZEV Act) from their ZEV unit balance each year on the compliance date.

Compliance and the Grace Year

To be in compliance a regulated party's balance of ZEV units at the end of every compliance date must be zero or positive. One grace year (section 10(4) in the ZEV Act) is allowed as long as the supplier was in compliance the previous model year and can make up both ZEV units from the out-of-compliance model year and the model year used as the grace year by the compliance date of that year. See Appendix B, Example 3 of a worked example of the grace year provision, i.e. such that the ZEV unit balance by the compliance date of the second year is brought back to zero or positive. On each compliance date, the balance is reduced by the number of ZEV units a supplier needs to accumulate in that model year.

With MY2020 being the first compliance year with reductions, if MY2020 ends up with a negative balance, the negative balance is not subject to the automatic administrative penalty. However, if there is still a negative balance on September 30, 2022 (after applying the compliance requirements for MY2021) then an automatic administrative penalty (AMP) is due on the amount of that negative balance. If there is a zero or positive balance on September 30, 2022, then no administrative penalty would be due. In this example, because a grace year was used for MY2020 AMPs, then a grace year cannot be used for MY2021 AMPs. Further, in this example, if the supplier was also out-of-compliance for MY2021, then that supplier would not be eligible for a grace year for MY2022 compliance.

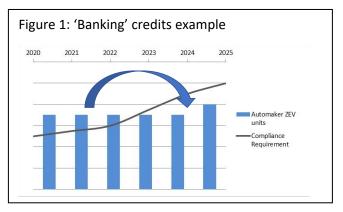


Note: See Appendix B for several worked examples of compliance.

Using credits to offset debits

ZEV credits usage in a supplier's balance follow the credit "offsetting rules" in section 12 of the ZEV Act. Debits of the "unspecified" ZEV class can be offset by either Class A or Class B credits. The oldest model year credits in the supplier's balance are used first towards compliance. Under s. 12(2)(b)(iii) of the ZEV Act, the supplier can choose which ZEV class units to offset the unspecified ZEV class debits.

Credits from previous or future model years can be used to satisfy a current model year compliance requirement. For example, MY2019 or later credits (including any MY2025 credits) in a supplier's balance could be used towards MY2024 compliance requirements. In the example in Figure 1, a supplier has excess ZEV credits in 2020 through 2022, which it "banks". Those credits are used to cover the gap between ZEV credits earned and the compliance requirement starting in 2023 through 2025, in order that it can be in compliance in those years.



Credits do not expire

Currently, validated ZEV credits do not expire. While section 43(e) of the Act allows for regulations providing for the expiration of credits, the ZEV Regulation has not implemented credit expiration at this time and so credits can be carried forward. For example, in theory, a supplier could use a MY2023 credit to meet a MY2032 (on September 30, 2033) compliance requirement. However, in practice the oldest credits in the supplier's balance will be used first towards compliance.

Reduction of supplier balances

Although ZEV credits do not expire, the 2023 amendments to the ZEV Act and 2024 amendments to the ZEV Regulation make changes to the ZEV credit provisions so that all eligible vehicles that earn credits on or after October 1, 2026, will earn one credit per eligible vehicle. To ensure that any supplier credit balances are aligned with this change, supplier credit balances will be reduced by dividing the balance by 3.5 (section 16.1 of the ZEV Act and section 16.01 of the ZEV Regulation). The reduction of credit balances will take place October 1, 2026. On this date, the number of credits or debits held by each supplier will be reduced by dividing the supplier's balance by 3.5. Credits applied for during the model year's assessment process



would be divided by 3.5 as these credits are deemed to be issued on the compliance date (section 19(2) of the ZEV Act).

As an example, if a supplier had 350 A credits and 175 B credits at the end of September 30, 2026, those credits would be divided by 3.5 as per table below.

Table 5: Example credit balance reduction at end of MY2025				
Credit Class Credit balance Calculation Credit balance after				
before reduction reduction				
Class A credits	350 A credits	350 ÷ 3.5	100 A credits	
Class B credits	175 B credits	175 ÷ 3.5	50 B credits	

Timing of sales and validation of credits in compliance

The director may issue ZEV credits for consumer sales (using the online ZEV Reporting System) either on application by the supplier or on assessment by the director of a model year report.

For ZEV sales of a model year that occur prior to or on the compliance date for that model year, a supplier must either apply for credits prior to the compliance date or as part of the model year's assessment process. For example, if a MY2023 sale happened on or before the September 30, 2024, compliance date but the supplier did not apply for credits to be validated for that sale prior to September 30, 2024, then the supplier must include that sale as part of the 2023 model year reporting process to obtain credits on assessment by the director.

If an eligible MY2023 ZEV sale happened after the MY2023 compliance date (September 30, 2024), once validated, the credits from that sale would go into the automaker's credit balance and could be used for MY2024 or later year compliance requirements.

If a MY2024 ZEV sale was made prior to the MY2023 compliance date (September 30, 2024) and credits for that sale were issued before the MY2023 compliance date, then the MY2024 credits could be counted towards MY2023 compliance obligation. However, if a MY2024 ZEV sale was made prior to the MY2023 compliance date (September 30, 2024) and credits for that sale were not issued before the MY2023 compliance date, then the MY2024 credits could not be counted towards MY2023 compliance. Only ZEV sales of the model year (that occur prior to or on the compliance date for that model year) can be applied for credit as part of that model year's assessment process, e.g. only MY2023 ZEV sales could be applied for credit as part of the 2023 model year's assessment process. Suppliers are strongly encouraged to apply for credits (for ZEV sales made prior to the CMY2023 compliance date) prior to the compliance date. If a MY2024 ZEV sale was made prior to the MY2023 compliance date (September 30, 2024), the regulated party also has the option of waiting to claim the MY2024 ZEV credits in an application before



the MY2024 compliance date (but after the MY2023 compliance date) or as part of the MY2024 assessment process.

If a ZEV of a model year is sold before that model year compliance date, then, as per Section 17 (4) of the ZEV Act, the vehicle sale, model and vehicle identification number (VIN) must be reported in that model year report. For example, if a MY2024 ZEV is sold before September 30, 2025 (the MY2024 compliance date), its vehicle model and vehicle identification number must be reported in the 2024 model year report, regardless of how early it was sold or whether the credits had been issued and used prior (e.g. it could have been sold January 10, 2023 and used the credits to meet MY2023 compliance). In practice, when the supplier comes to compile the model year report in the ZEV Reporting System, the system will automatically generate a summary of the supplier's ZEV consumer sales for that model year, based on the sales submitted in their applications for ZEV credits. After submitting the model year report, if the supplier becomes aware that a MY2024 sale had occurred prior to the compliance date but was not reported as part of the 2024 model year report, the supplier must submit a supplementary report.

Supply and Registration

Prior to October 1, 2024, compliance requirements were based on consumer sale of the vehicle. Beginning October 1, 2024, compliance requirements are based on the supply of vehicles into B.C. for consumer sale, with the additional requirement that the director may not issue credits unless they are satisfied that the vehicle has been registered in B.C.³ (section 13(3)). This means that as of October 1, 2024, a vehicle must be registered in B.C. to earn credits. This means that even if a supplier applies for credits on or after October 1, 2024, for a vehicle sold before October 1, 2024, the vehicle must be registered for the supplier to receive credits for that vehicle.

Compliance ratios

On the compliance date, the supplier's balance will be reduced by the number of ZEV units calculated under section 11 of the Act. The reduction will be based on the "compliance ratio" and the number of consumer sales of that model year ("NV value"). Because some ZEVs are worth more than one ZEV unit, the compliance ratios are higher than the sales targets set out in Part 2 of the ZEV Act until MY2026. For example, to ensure the previously legislated vehicle target of 10% of light-duty vehicle sales in BC are ZEVs in 2025, the compliance ratio for ZEV units is 22%. Sections 11 and 12 of the Regulation prescribe the compliance ratios through to 2035.

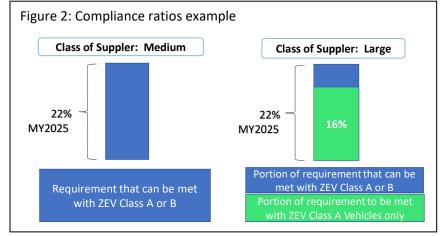
³ The vehicle must be registered under the *Commercial Transport Act, Motor Vehicle Act* or *Off-Road Vehicle Act*. **10** | P a g e Version 2: July 30, 2024



The amendments that were made to the ZEV Regulation in 2024 change the current crediting system so that beginning October 1, 2026, all eligible vehicles earn one credit. This means that the compliance ratios for MY2026 and beyond are closer to the sales targets set out in the Act but are slightly higher to account for small volume supplier vehicles not being captured within the sales mandate.

Compliance ratios for medium vs large classes of suppliers

Medium volume suppliers can use any combination of ZEV Class A and/or B credits to meet their compliance requirements until model year 2026. Beginning MY2026 compliance period, medium volume suppliers will also be required to meet the minimum ZEV Class A % requirement (as detailed below).



Large volume suppliers must

meet a minimum ZEV Class A % requirement. The remainder of the compliance requirement can be met with either ZEV Class A or B credits.

Figure 2 illustrates the different compliance requirements for medium and large volume suppliers up until MY2026, at which point the minimum Class A % requirement would also apply to medium volume suppliers.

NV Value

When calculating the value of the number of consumer sales (up to and including MY2023)/ vehicles supplied (for MY2024 and later), before the compliance date, of motor vehicles of the model year (NV in sections 11(1) and 11(2) of the Act), there is no "start date". The NV value includes both ICE and EV sales/supplied vehicles of the current model year that occur before the compliance date. While ZEV sales of a model year after the compliance date can still be claimed for ZEV credits, the NV value will not be adjusted if any model year sales/ supplied vehicles (of either ICE or ZEV) are made after the compliance date. For clarity, as of October 1, 2024, the NV value is based on the total number of vehicles supplied into B.C. for consumer sale or lease (prior to this the NV value was based on consumer sale of the vehicles).

With the addition of Class 2B vehicles in B.C.'s ZEV mandate beginning October 1, 2024, the NV value excludes motor vehicles that have a gross vehicle weight rating of more than 3,856 kg



(Class 2B) that were supplied before October 1, 2024. As of October 1, 2024, these vehicles would be captured within the NV value.

2.8 ZEV Credits for vehicles

Sales of ZEVs is one of four ways (See Figure 3) the ZEV Act enables suppliers to accumulate ZEV credits towards their compliance requirements.

Sales of Class A and B ZEVs of MY2019 and later model years can generate ZEV credits⁴.

The Regulation specifies that until September 30, 2026, ZEV credits⁵ issued per sale are based on ZEV class and allelectric range as follows (Table 6):

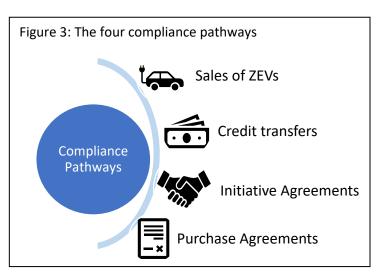


Table 6: ZEV Credit Calculations for Eligible Vehicles (until September 30, 2026)				
Class Credit Formula Maximum ZEV Credits				
Class A	(EPA Range x 0.006214) + 0.5	4		
Class B	SS B (EPA Range x 0.006214) + 0.3 1.1; an additional 0.2 is added for meeting US06, to a maximum of 1.3			

Therefore, in general, higher range, all-electric ZEVs receive more credits (until September 30, 2026), and one ZEV sale usually does not equal one ZEV unit.

As of October 1, 2026, all eligible ZEVs will earn one credit per vehicle (Table 7).

Table 7: ZEV Credits for Eligible Vehicles (Beginning October 1, 2026)				
Class	Class Credit Formula Maximum ZEV Credits			
Class A	Class A No longer applicable 1			
Class B	Class B No longer applicable 1			

The 'EPA range' as defined in the ZEV Regulation is the "all-electric driving range, in kilometres, of a zero-emission vehicle", as obtained through the United States Environmental Protection Agency's (EPA) 5-test-cycle methodology. The director issues ZEV credits based on the ZEV Class and EPA range of the vehicle. The EPA range of each vehicle model must be submitted to the

⁴ If sold on January 2, 2018, or later

⁵ If the result of the calculation contains more than 2 decimals, it is rounded to the nearest second decimal.



director by the supplier and verified against the range figure published in Natural Resources Canada's Fuel Consumption Guide. If a model is not included in this guide, the Province may require the vehicle supplier to provide evidence to substantiate the range figure supplied.

The Province understands that the EPA accepts several methods for calculating the 5-cycle vehicle range that do not require all five test cycles. This includes the option of adjusting 2-cycle test values as outlined in the EPA guidance "<u>EPA Test Procedures for Electric Vehicles and Pluq-in Hybrids - Draft Summary</u>" (D. Good, November 2017) concerning the testing of battery electric and plug-in hybrid vehicles to establish an equivalent all-electric range. The Province will accept 5-cycle range values that are arrived at using any of the accepted EPA methods.

For determining the range of Class 2B vehicles (vehicles with a gross vehicle weight rating over 3,856 kg and less than 4,537 kg), a method other than the EPA 5-cycle range may be used to determine vehicle range if no 5-cycle range value is available. Another method may be used only if that method accounts for, at a minimum, urban and highway driving conditions, and the director is satisfied that the method is accurate.

2.9 ZEV Credits from Initiative Agreements

Initiative Agreements are another way a supplier can accumulate ZEV credits towards their compliance requirements. The ZEV Act gives the director, with the approval of the Minister, authority to enter into an agreement to issue credits for actions taken by suppliers to reduce GHG emissions from motor vehicles and increase consumer sales or use of ZEVs in B.C.

Only regulated parties (suppliers as defined in Section 2 of the Act) can enter into Initiative Agreements with the director, but other entities may participate indirectly through a separate arrangement with a supplier. Credits under Initiative Agreements may be issued for:

Sales of:

1) Used, new-to-B.C. ZEVs;

2) Medium/heavy duty ZEVs; and/or

3) Selling new ZEVs to a carsharing organization at 25% or below the manufacturer suggested retail price (MSRP).

Suppliers may earn up to 5% of the total compliance requirement for the previous model year through initiative agreements. (E.g., If a supplier's compliance obligation in the 2023 model year was 1000 credits, that supplier could earn 50 credits in the 2024 compliance period through initiative agreements).



2.10 ZEV Credits from Purchase Agreements

The ZEV Act provides authority for the director to issue credits to a supplier under Purchase Agreements. Purchase Agreements are intended as a last resort to deal with unforeseen circumstances. Purchase Agreements must be negotiated prior to the compliance date. They are one of the compliance pathways available to suppliers. The price of a credit under a Purchase Agreement is determined by multiplying the prescribed penalty rate in section 17 of the Regulation by 110%. Prior to MY 2026, the purchase price is \$5,500. Beginning in MY2026, the purchase price will increase in line with the changes to prescribed penalty rate (see section 2.13 of the guidance document).

2.11 Transfers of ZEV Credits

Although the ZEV Act provides authority for regulations respecting transfer of credits (see Section 16) between suppliers, no regulations respecting transfers are contemplated at this time. The terms of the transfer are negotiated between suppliers. A notice of the proposed transfer must be submitted through the ZEV Reporting System by both parties involved in the transfer and specify, by model year, vehicle class and ZEV class:

- the number of credits to be transferred,
- dollars per credit⁶ of the model year, vehicle class and ZEV class.

Once submitted, the transfer will be reviewed and may be recorded by the director. Once a transfer is recorded by the director the suppliers' balances will be updated.

2.12 Applying for Credits and Validation in the ZEV Reporting System

Application for issuance of ZEV credits can occur any time (for MY2019 and later new sales that occurred Jan. 2, 2018 & onward). Suppliers must submit details of their ZEV models for validation through the ZEV Reporting System to be eligible for credits. Applications for ZEV credits for consumer sales or submitting notices of credit transfers must be made through the online ZEV Reporting System. Multiple credit applications can be made during the year through the ZEV Reporting System. ZEV credits from Initiative Agreements and purchase agreements will be negotiated through a separate process between a supplier and the Ministry and issued using the ZEV Reporting System.

As discussed above (in section 2.7 Supply of ZEVs and Compliance Ratios), where the supplier has not applied in advance of the compliance deadline for credits for consumer ZEV sales, ZEV credits can also be issued on assessment by the director (i.e. based on the supplier's model year report).

⁶ Price per credit will not be published at this time, but in future, aggregate price information may be published, as is done by the Low Carbon Fuel Standard program.



Validated credits from all processes (including Initiative and Purchase Agreements) will be added to the supplier's balance in the ZEV Reporting System and will be available to be used for compliance. ZEV sales are validated by the Province using ICBC vehicle registration data. The ZEV Reporting System keeps track of a supplier's balance of both Class A and Class B ZEV credits separately. In summary, the ZEV Reporting System is used to record ZEV sales and credit transfers, issue ZEV units, and 'submit' model year reports. Generally, supplier reporting is to be done within the ZEV Reporting System, unless the Ministry directs otherwise.

2.13 Non-compliance – Automatic and discretionary administrative penalties and Offences

The ZEV Act provides authority for the recovery of administrative penalties. The Regulation prescribes \$5,000 per ZEV unit as the prescribed penalty rate for the automatic administrative penalty for MY2025 and earlier model years. For MY2026 the prescribed penalty amount is \$20,000 to align with the switch to vehicles earning one credit per vehicle. For MY2027 and later model years the prescribed penalty rate also includes an inflation adjustment based on the consumer price index. This is calculated by multiplying the penalty rate for the immediately preceding model year and the sum of one and the annual percentage change for the calendar year (CY) immediately preceding the calendar year in which the compliance date for the model year occurs. For example, in MY2027 the penalty rate is:

\$20,000 x (1 + the annual percentage change for CY2027*)

In addition, the ZEV Act and Regulation also detail when discretionary administrative penalties may be imposed and the maximum amount for each type of penalty. The ZEV Act also establishes offences (Division 3).

3. Additional Questions & Feedback

If you have additional questions, or suggestions for this document, please contact the Ministry of Energy, Mines and Low Carbon Innovation's Clean Transportation Branch at <u>ZEVRegulation@gov.bc.ca</u> or your ZEV Regulation contacts within the Clean Transportation Branch.

(*Updated for clarity in December 2024. The previous version incorrectly said CY2026.)

Version 2: July 30, 2024



Appendix A – Summary of Changes to the ZEV Act and Regulation

(2023/2024 Amendments)

14 m	Section(s)			
Item	(Act/Regulation)	Summary		
Changes apply upon Royal Assent of the ZEV Act (November 30, 2023)				
	or deposit of	the ZEV Regulation (July 6, 2024)		
Increase the ZEV	Act – S. 7&9	-The targets were changed to 26% in 2026, 90% in 2030 and		
targets and change		100% in 2035		
the prohibition year		-The prohibition date on the sale of new vehicles that are not		
		ZEVs was change to January 1, 2035		
Provincial Targets	Act – S. 8	-Changes the date that the director must publish the		
Report Date		provincial targets report (from March 31 to April 30)		
Capture Class 2B	Act – Part 2	-Captures Class 2B vehicles in the ZEV targets and the		
vehicles in ZEV targets		prohibition date on the sale of new vehicles that are not ZEVs		
and prohibition year				
Initiative agreements	Act – S. 27&31	-Creates an offense and administrative penalty for providing		
 False or misleading 	Reg – S. 18	false or misleading information when seeking to enter into an		
information		initiative agreement		
EPA range definition	Reg – S. 1	-Updates the EPA range reference in the United States Code		
		of Federal Regulations		
Model year report –	Act – S. 17	-Includes an explicit requirement for suppliers to include the		
total vehicles sold		total number of vehicles sold in their model year report		
ICBC information	Act – S. 39.1	-Enables the director to request ICBC to provide information		
		for the purposes of carrying out the director's powers and		
		duties under the Act and requires ICBC to provide this		
		information.		
	Changes	apply as of October 1, 2024 ⁷		
Registration and sales	Act and	-Supplier report on the total number of vehicles supplied and		
requirement	Regulation	compliance obligations are based on supply of vehicles.		
	(throughout)	-Credits are only issued to vehicles that have been registered		
		in B.C.		
Class 2B vehicles	Act and	-Vehicles with a gross vehicle weight rating over 3,856 kg and		
	Regulation	less than 4,537 kg are captured in B.C.'s ZEV mandate.		
	(throughout)			

⁷ This section is referring to changes that take effect beginning October 1, 2024, which is not always the same as when the Act or Regulation amendments come into force (e.g., all changes to the Act and Regulation come into force by October 1, 2024, but some of the changes don't apply until the 2026 model year or another specific date as listed in the table).



ZEV Sales Forecast	Act – S. 18.1	Suppliers required to submit a forecast report appually when		
		-Suppliers required to submit a forecast report annually when		
Report	Reg – S. 16.3	they submit their model year report containing information		
		set out in the ZEV Regulation.		
Purchase Agreement	Reg – S. 16	-The purchase agreement becomes the prescribed penalty		
Price		rate times 110% so that it remains relative with any changes		
		to the automatic administrative penalty rate.		
		Model Year 2026		
Compliance ratios	Reg – S. 11&12	-Changes to the compliance ratios beginning MY2026 to align with the changes to the ZEV sales targets and to reflect the		
		change to vehicles earning one credit per vehicle as of October 1, 2026.		
Vehicle range	Reg – S. 1 & 6-	-Changes to the minimum ranges and classification of vehicles		
requirements and	6.3	to earn credits under the ZEV Act and Regulation.		
vehicle classes				
Medium volume	Reg – S. 8&10	-Medium volume suppliers would be captured in the		
suppliers		requirement for suppliers to sell a certain number of Class A		
		vehicles.		
Automatic	Reg – S. 17	-The automatic administrative penalty rate is set to increase		
administrative penalty		relative to the change to a one credit per vehicle credit		
rate		system and be tied to the consumer price index (inflation		
		adjusted).		
		October 1, 2026		
One credit per vehicle	Reg – S. 14.1	-On or after October 1, 2026, eligible vehicles will earn one		
		credit per vehicle.		
Credit balance	Act – S. 16.1	-Existing supplier credit balances will be reduced by dividing		
reduction	Reg – S. 16.01	the supplier's balance by 3.5		
	0	Other		
Initiative agreements	Reg – S. 15	-Enables the director to enter into an initiative agreement		
– car sharing		with a supplier if the supplier has sold vehicles to a car share		
0		organization at a discount.		
		-Although this provision came into force October 1, 2024, it is		
		up to the director's discretion to determine if and when they		
		will enter into an initiative agreement with a supplier.		
New vehicle	Act – S. 13&43	-Allows the Province to place additional requirements (by		
requirements		regulation) on vehicles to earn credits.		
- equilemento		-Although the regulation making authority exists, no new		
		requirements have been implemented.		
		requirements have been implemented.		



Appendix B – Worked Examples

Example 1 - MY2020 compliance achieved for a large volume supplier (prior to the shift to one credit per vehicle)

Date	Transactions	Credits	Offsetting Debits	Balance
Sep. 1, 2020	Opening Balance	0.00A 0.00B	0.00A 0.00B	0.00A 0.00B
Dec. 1, 2020	Credit application: 200 MY2019 BEV sales (@ 2 credits each); 300 MY2019 PHEV sales (@ 1 credit each)	400.00A MY2019 300.00B MY2019		400.00A MY2019 300.00B MY2019
June 1, 2021	Credit application: 150 MY2020 & 100 MY2021 BEV sales (@ 2 credits each); 400 MY2020 PHEV sales (@1 credit each)	300.00A MY2020 200.00A MY2021 400.00B MY2020		400.00A MY2019 300.00A MY2020 200.00A MY2021 300.00B MY2019 400.00B MY2020
Sep. 30, 2021	Compliance date MY2020: Total MY2020 sales (ZEV + ICE) = 10,000 NV value Large supplier compliance ratios: 9.5% total - 6%, ZEV class A, 3.5% unspecified ZEV class ⁸ , means deduction of 600 A & 350 unspecified		-400.00A MY2019 -200.00A MY2020 -300.00B MY2019 -50.00B MY2020	00.00A MY2019 100.00A MY2020 ⁹ 200.00A MY2021 00.00B MY2019 350.00B MY2020 ¹⁰

Positive balance on Sept. 30, 2021 means supplier is in compliance.

⁸ Debits of the "unspecified" ZEV class can be offset by either Class A or Class B credits.

⁹ The oldest model year credits in the supplier's balance are used first towards compliance.

¹⁰ Under s. 12(2)(b)(iii), the supplier can choose which ZEV class units to offset the unspecified ZEV class debits. In this example, the supplier chose to use ZEV Class B credits to cover the 350.000 unspecified ZEV class debits.



Example 2A - MY2020 non-compliance & grace year for a large volume supplier (prior to the shift to one credit per vehicle)

Date	Transactions	Credits	Offsetting Debits	Balance
Sep. 1, 2020	Opening Balance	0.00A 0.00B	0.00A 0.00B	0.00A 0.00B
Dec. 1, 2020	Credit application: 50 MY2019 BEV sales (@ 2 credits each); 50 MY2019 PHEV sales (@ 1 credit each)	100.00A MY2019 50.00B MY2019		100.00A MY2019 50.00B MY2019
June 1, 2021	Credit application: 50 MY2020 BEV sales(@ 2 credits each); 50 MY2020 PHEV sales (@ 1 credit each)	100.00A MY2020 50.00B MY2020		100.00A MY2019 100.00A MY2020 50.00B MY2019 50.00B MY2020
Sep. 30, 2021	Compliance date MY2020: Total MY2020 sales (ZEV + ICE) = 10,000 NV Large supplier compliance ratios: 6% A, 3.5% unspecified, means deduction of 600 A & 350 unspecified		-100.00A MY2019 -100.00A MY2020 -50.00B MY2019 -50.00B MY2020	-400.00A -250.00 unspecified

Negative balance on Sep 30, 2021 means supplier is out of compliance. No automatic penalties (AMP) due to this being the first year of non-compliance. [Grace period allows for true up by Sept. 30, 2022 to avoid AMP.]

Jun 1, 2022	Credit application: 650 MY2021 BEV sales (@ 2 credits each)	1300.00A MY2021		900.00A MY2021 -250.00 unspecified ¹¹
July 1, 2022	Credit transfer received	700.00B MY2021		900.00A MY2021 450.00B MY2021
Sept. 30, 2022	Compliance date MY2021: Total MY2021 sales (ZEV + ICE) = 10,000 NV Large supplier compliance ratios: 8% A, 4% unspecified, means deduction of		-800.00A MY2021 -400.00B MY2021	100.00A MY2021 50.00B MY2021

Positive balance on Sept. 30, 2022 means supplier is back in compliance. No AMP - supplier brought themselves back into compliance within one model year. The next MY that the supplier can use the "grace year" rule is MY2022, i.e. supplier can be out of compliance on Sept 30, 2023 without facing AMP.

¹¹ Note: The negative balance of the "unspecified class" continues after this credit application because the supplier chose in the last model year report process to prioritize using its B credits to offset its unspecified class deficit. When it obtains B credits, it will use those credits against the unspecified deficit.

19 | Page

Version 2: July 30, 2024

Information in this document is for convenience and guidance only and does not replace nor constitute legal advice.



Example 2B - Alternate Scenario – MY2020 and MY2021 non-compliance & grace year for a large volume supplier

(prior to the shift to one credit per vehicle)

→	Date	Transactions	Credits	Offsetting Debits	Balance
	Sep. 30, 2021	Balance after MY2020 compliance ratio reduction (For the MY2020 compliance reduction as well as transactions prior to this date see first part of Example 2A)			-400.00A -250.00 unspecified
	June 1, 2022	Credit application: 650 MY2021 BEV sales (@ 2 credits each)	1300.00A MY2021		900.00A MY2021 -250.00 unspecified
	July 1, 2022	Initiative agreement for used ZEV Class A sales (5% max of ZEV total for previous model year (MY2020), i.e. 10,000 x (6% + 3.5%) x 5%)	47.50A MY2021		947.5A MY2021 -250.00 unspecified
	Sept. 30, 2022	Compliance date MY21: Total MY21 sales (ZEV + ICE) = 10,000 Large supplier compliance ratios: 8% A, 4% unspecified, means deduction of 800 A & 400 unspecified		-947.5A MY2021	0.00A ¹² -502.5 unspecified
	Oct. 1, 2022	Automatic penalty for non-compliance (\$5,000 per credit = \$2,512,500)	502.5 unspecified MY2021		0.00A 0.00 unspecified

Negative balance on Sept. 30, 2022 means supplier is not in compliance for second consecutive year, MY2021. Automatic penalties apply to balance at Sept. 30, 2022. On payment of penalty, balance is increased to bring to zero. The next MY that the supplier can use the "grace year" rule is MY2023, assuming MY2022 is in compliance, because MY2021 was out of compliance as of the compliance date.

Version 2: July 30, 2024

¹² Note: the 147.5 Class A credits were automatically used to cover some of the 650 unspecified ZEV class credits owing, leaving 502.5 unspecified ZEV class credits owing



Example 2C - Alternate Scenario – MY2020 and MY2021 non-compliance & grace year for a large volume supplier

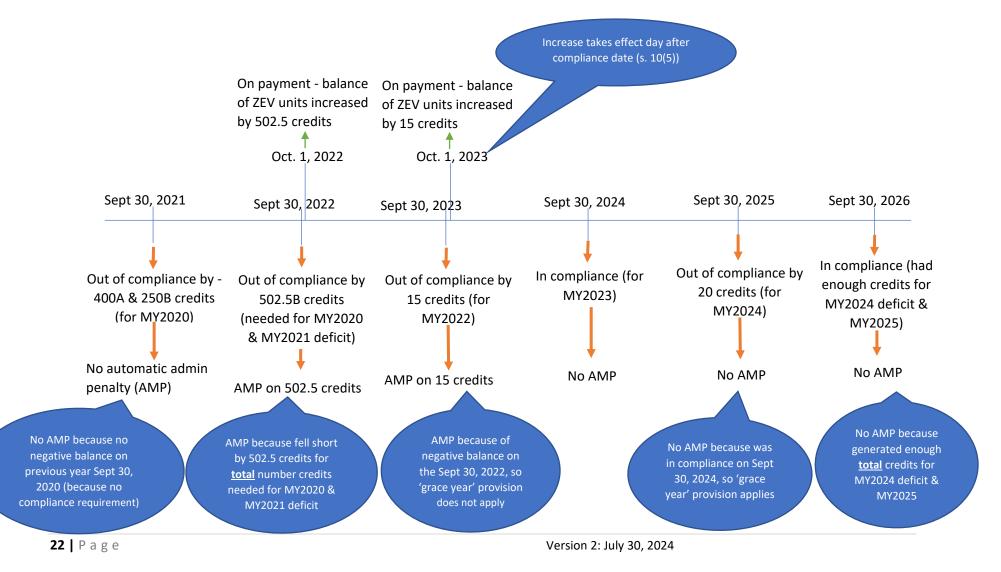
(prior to the shift to one credit per vehicle)

Date	Transactions	Credits	Offsetting Debits	Balance
Sep. 30, 2021	Balance after MY2020 compliance ratio reduction (For the MY2020 compliance reduction as well as transactions prior to this date see first part of Example 2A)			-400.00A -250.00 unspecified
June 1, 2022	Credit transfer received	400.00A MY2022 250.00B MY2021		0.00A 0.00 unspecified
July 1, 2022	Credit application: 150 MY2021 BEV sales (@ 2 credits each); 50 MY2022 PHEV sales (@ 1 credit each)	300.00A MY2021 50.00B MY2022		300.00A MY2021 50.00B MY2022
Sept. 30, 2022	Compliance date MY21: Total MY21 sales (ZEV + ICE) = 10,000 Large supplier compliance ratios: 8% A, 4% unspecified, means deduction of 800 A & 400 unspecified		-300.00A MY2021 -50.00B MY2022	-500.00A -350.00 unspecified
Oct. 1, 2022	Automatic penalty for non-compliance (\$5,000 per credit = \$4,250,000)	500.00A MY2021 350.00B MY2021		0.00A 0.00 unspecified

Negative balance on Sept. 30, 2022 means supplier is not in compliance for second consecutive year (i.e. for MY2020 and MY2021). Automatic penalties apply to balance at Sept. 30, 2022. On payment of penalty, balance is increased to bring to zero. The next MY that the supplier can use the "grace year" rule is MY2023, assuming MY2022 is in compliance, because MY2021 was out of compliance as of the compliance date.



Example 3 - "Grace Year" (ZEV Act - sec. 10 Supply of ZEVs) (prior to the shift to one credit per vehicle)



Information in this document is for convenience and guidance only and does not replace nor constitute legal advice.