



Modernizing Ontario’s Framework for Power-Assisted Bicycles (E-Bikes)

The Ministry of Transportation is proposing to create a **two-class definition for power-assisted bicycles**. The proposal would also clarify that moped/scooter- or motorcycle-style electric motor vehicles would only be permitted on roads if they meet the requirements of an existing motor vehicle class (e.g., motorcycle, limited-speed motorcycle, or motor-assisted bicycle) under the *Highway Traffic Act*.

Requiring moped/scooter- or motorcycle-style electric motor vehicles to meet existing motor vehicle class standards would enhance safety and support fairness in the marketplace by ensuring that manufacturers of motor vehicle-like products are subject to, and operate under, appropriate motor vehicle regulatory requirements and consistent standards.

A 12-month education and awareness period is proposed to support the public, manufacturers, retailers, and stakeholders in understanding and complying with the updated rules.

Proposed E-bike Class 1 and Class 2: Key Operator, Vehicle and Safety Requirements

	Class 1	Class 2
Example Photos		
Definition	Required to have an exposed frame, not covered by body panels, and cannot have a footrest or a platform for the operator’s feet	
Propulsion Method	Pedal-assist only with exemption to permit a throttle or button for “walk-assist function” up to 6km/h	May be throttle, button or pedal assist

Pedals	<p>Must be equipped at all times with functional hand cranks or foot pedals that are capable of propelling the bicycle by muscular power and are usable during normal operation of the bicycle; however, continuous pedalling is not required.</p> <p>Pedals are not considered functional if their placement, configuration, or operation renders them impractical, unsafe, or incapable of providing meaningful propulsion during normal riding conditions.</p>	
Wheels	Designed to travel on not more than three wheels in contact with the ground	
Maximum Unladen Weight	55 kilograms	120 kilograms*
<small>*If passed, the Ministry would explore amending Ontario's Cargo E-bike Pilot Regulation (O.Reg. 141/21) to update the minimum weight requirement for cargo e-bikes from 55kg to 120kg.</small>		
Maximum Power-Assisted Speed	32 kilometres/hour	
Seat Requirements	Operator seat height must be adjustable	
Maximum Motor Power	Total continuous power output rating, measured at the shaft of each motor, of 500 W or less	
Wheel Width	None	
Wheel Diameter	Minimum 350 mm (including tire)	
Electric Terminals	All electric terminals must be completely insulated and covered	
Braking	Must be capable of bringing the bicycle, while being operated at a speed of 30 kilometres per hour on a clean, paved and level surface, to a full stop within nine metres from the point at which the brakes are applied	
Lighting/Bell or Horn	<p>Bell or horn required as well as the following lights, reflective tape and reflectors:</p> <ul style="list-style-type: none"> ○ a white light mounted on front ○ a red light or reflector on the back ○ white reflective tape on the front ○ red reflective tape on the rear 	
Modifications	No modifications permitted	
Licence/Insurance/Registration	No	
Minimum Operator Age	16	

Are passengers permitted?	Yes – passengers of any age are permitted, provided a seat is available (either an original equipment seat or a seat designed to be compatible with the vehicle)
Are helmets required?	Compliant bicycle or motorcycle helmet required for all riders

Moped/Scooter and Motorcycle-Style Electric Motor Vehicles

Example Photos:



Moped/scooter- and motorcycle-style electric motor vehicles, which are generally heavier, capable of higher speeds, fully throttle-powered, and may have body panels partially or fully covering the frame would **only be permitted if they comply with an existing motor vehicle class**, as shown in the table below, ensuring that they meet the safety and operational standards appropriate to their design and intended use.

Vehicle Class		Motor-Assisted Bicycle (Moped)	Limited-Speed Motorcycle (LSM)	Motorcycle
Vehicle Requirements	Class	Motor Vehicle (may be electric or gas powered)		
	Federal Compliance Label	Required to certify the vehicle meets all applicable Canadian Motor Vehicle Safety Standards (CMVSS)		
	Maximum Weight	55 kilograms	No limit	
	Maximum Speed	50 kilometres/hour with motor assistance	70 kilometres/hour with motor assistance	N/A
	Operable Pedals Required	Yes	No	
Operator Requirements	Licence	M or M with condition L		M or M with condition M (three wheeled motorcycle)
	Insurance/Registration	Yes		

	Helmet	Required for all riders	
	Driver Age	16+	
	Passengers	No	Yes