

B.C. Energy Efficiency Act (EEA) Standards for Small Battery Charging Systems

What is B.C. regulating?

The small battery charging system regulation applies to electronic systems manufactured or sold in B.C. that contain battery charging circuits with an **input capacity of less than 2kW**. The regulation covers **consumer electronic devices** such as notebook computers, tablets, power tools, electric toothbrushes, shavers, phones, mobile workstations, and uninterruptible power supplies.

What energy efficiency requirements must be met?

Performance Parameter	Capacity Range (E_b)*	Standard*
Maximum 24-hour charge and maintenance energy (W·h)	$\leq 2.5 \text{ W}\cdot\text{h}$	$16 \times N$
	$> 2.5 \text{ W}\cdot\text{h}$ to $100 \text{ W}\cdot\text{h}$	$12 \times N + 1.6 \times E_b$
	$> 100 \text{ W}\cdot\text{h}$ to $1000 \text{ W}\cdot\text{h}$	$22 \times N + 1.5 \times E_b$
	$> 1000 \text{ W}\cdot\text{h}$	$36.4 \times N + 1.486 \times E_b$
Maintenance Mode Power P_M and No-Battery Mode Power P_0 (W)		$P_M + P_0 \leq N + 0.0021 \times E_b$

* E_b = capacity of all batteries in ports, N = number of charger ports

When does the regulation take effect?

The effective date of the regulation is **June 1st, 2015**.

Does the regulation apply to products manufactured before the effective date?

Products manufactured after June 1st, 2015 are required to comply with the regulation. Products that are manufactured on or before June 1st, 2015 are not required to meet the requirements, and can continue to be sold after this date.

Where can I test and verify my product's energy performance?

Testing and verification must be performed by Certification Organizations accredited by the Standards Council of Canada.

What is the applicable testing methodology?

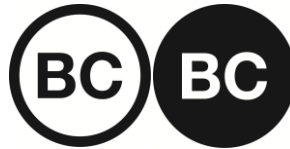
CAN/CSA 381.2-14 – Test method for determining the energy efficiency of battery charging systems

How is the regulation different from those in effect in California and Oregon?

The regulation is aligned with those in California and Oregon for small battery charging systems of input power less than 2kW. B.C. is not regulating battery charging systems of input power greater than 2kW at this time.

My company manufactures battery charging systems. Do I have to test my products with the CSA standard if they already demonstrate compliance with California's regulation?

Devices that meet the California Code of Regulations Title 20, Sections 1601-1608 on Battery Charger Systems, as indicated by the California compliance label, are considered to be compliant with B.C.'s standard as they are identical. They would not need to be tested again with the CSA test methodology. Examples of the California compliance label are shown here:



Who enforces this regulation?

The Ministry of Energy and Mines is responsible for enforcing all regulated standards under the *EEA*.

What are the penalties for non-compliance?

Under the *EEA*, the Ministry can conduct inspections to verify compliance with the *Act* and regulations. *EEA* enforcement begins with education and voluntary compliance measures. Ministry staff follow up on all complaints and other information respecting non-compliance, and communicate directly with industry participants to develop a compliance plan. The Ministry can also seek to have those who have contravened the legislation charged under the *Offence Act*.

For more information on B.C.'s Energy Efficiency Act:

<http://www.empr.gov.bc.ca/EEC/Strategy/EEA/Pages/default.aspx>