

The 'Electrification of Everything'

Impacts and Opportunities for the Canadian Electrical Industry

Brief Overview

In much the same way that the Internet of Everything has revolutionized the way people, processes, data and 'things' are networked and connected—creating new capabilities, richer experiences and unprecedented economic opportunity—we are in the midst of a transition that will electrify everything.

The onset of electrification is poised to change how Canadians use electricity for transportation, heating and cooling and other functions, previously driven by combustion. In fact, the [World Economic Forum](#) has published frameworks and recommendations to help countries accelerate their electrification efforts. This transition will depend on new technologies and services to transform the grid, and new infrastructure guidelines to support smarter, more energy-efficient urban planning. Electrification will require a fundamental philosophical, political and economic shift—and the electrical industry has an opportunity to lead this change.

Research Scope

EFC's research study will focus on the following:

- Why is electrification important? What's the demand for electrification in Canada over the next three-to-five years? What's the market potential for energy storage/batteries and other renewable sources?
- What impact will widespread electrification have on the grid, and how can our industry prepare for the change? How will this affect codes and standards and what other certifications could apply?
- What opportunities can our industry derive from new infrastructure requirements in commercial, industrial and residential applications?
- What impact will electrification have on our products today? How can we extend the reach of our current products (wire and cable, motors and generators, controls and sensors, heating systems, etc.) to support an 'electrified ecosystem'? What newer solutions can we provide?
- How will we address the emergence of new technology and service providers?

Schedule:

1. Committee meetings to be scheduled in October, November, January, March
2. Research to be prepared and launched by May 2019

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