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Carbon footprint study

Version 1 (updated May 18, 2017)

Context: Greenhouse gas (GHG) emissions are a large problem for industry. Regulatory measures to curb emissions have led many to seek innovative plans to reduce emissions.

Problem: The electrification of the Ontario vehicle fleet could cause Hydro One to experience a 10% increase in demand leading to higher line loss associated emissions due to heavier loading on the system. Population growth in Ontario could further exacerbate the problem.

Solution: Nine action based recommendations were developed to reduce the company's carbon footprint. Process maps will help Hydro One to systematically identify emission sources and a scenario analysis will allow them to project changes to its carbon emissions over the next 10 years.

Impact: Hydro One has made considerable progress in addressing its carbon footprint, particularly its Scope 1 and Scope 2 emission sources. Hydro One has been able to emerge as an industry leader with respect to emissions management.

CUE's role: Researchers performed a benchmark study reaching out to other electric utilities to determine and share emission measurement and reduction best practices. The team then identified and categorized emissions within Hydro One operations with three principle process maps.

 Completed

Sponsors:

Hydro One, OCE

Timeline:

January 2011–December 2012

Research team:

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Key stats

1.3 million Hydro One customers
97% Ontario transmission capacity
75% Scope 3 emissions

