



Powering Progress Initiative

2024

This report gathers data from Electricity Canada's national membership to better understand the electricity industry's progress.

This data set is based on...

- 29 utilities & electricity companies
- Over 17 million customers served
- Over 79 930* people employed by our members (*Based on 27 out of 29 members)

Community Relationships

Our members are investing in local communities and Indigenous Peoples.

Economic Impacts

Total national capital expenditures on infrastructure (CAD \$)

\$20,154,465,606

Which is on average...

\$694,981,572

per member company



\$68,066,526

Total national community investments (donations and sponsorships in CAD \$)

Indigenous Relations



\$917,678,225

Total national spending on Indigenous suppliers (CAD \$)

1.9% of total utility spending is on Indigenous suppliers

83%

of reporting utilities have processes, policies, and procedures in place to promote respect of Indigenous values, traditions, and rights.

76%

of reporting utilities have Indigenous cultural awareness training programs for staff and management.

Reliability

Electricity providers are working to ensure that Canada's grid is reliable. In fact, most service interruptions occur during major weather events.



System Average Interruption Duration Index (SAIDI) – 10.08 | 5.88

Total duration of outages for the average customer



System Average Interruption Frequency Index (SAIFI) – 3.09 | 2.37

Average number of times a customer experiences an outage



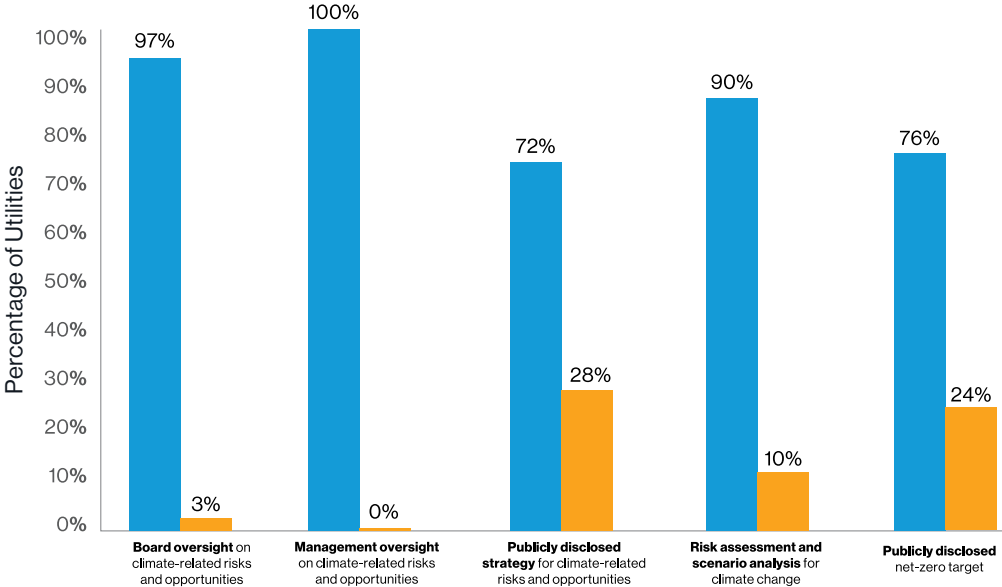
Customer Average Interruption Duration Index (CAIDI) – 3.27 | 2.13

Average amount of time to restore service after an interruption

■ Significant events excluded

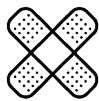
Managing Climate-related Risks

■ Yes
■ No



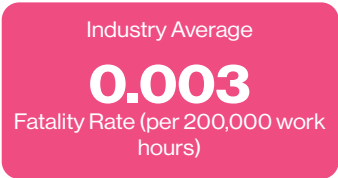
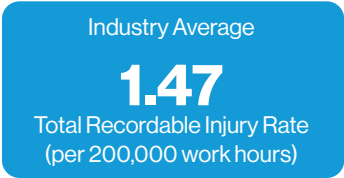
Fair and Safe Workplace

Our members work hard to foster health, safety and diversity in the workplace.



Fatality/Injury Rate

Our members closely track injuries occurring in the workplace in order to continuously improve processes.



✓

✗

Workforce health & Safety/OHS		
Does your company include safety goals as part of its annual corporate/performance scorecard?	100%	0%
Does your company use leading indicators for performance safety management?	93%	7%
Is your company aligned with or certified in national/internationally recognized OHS standards?	86%	14%
Workplace Demographics		
Does your company have board-level governance over workplace DEI?	86%	14%
Does your company have a DEI-related policy and/or goals/objectives?	100%	0%
Does your company internally track, monitor, and report on DEI goals/objectives?	90%	10%
Does your company conduct surveys to measure job satisfaction and engagement of employees, including in the skilled trades?	90%	10%
Does your company use this feedback to identify areas for improvement?	97%	3%

Utility Demographics



Environment

In Canada, 84% of Electricity generated in 2020 came from low-emitting, non-combustion sources (*ECCC National Inventory Report, 2022*). Still, we need to continue to reduce emissions – even as we increase the power we generate.

**4,420 kg
SF₆**

Total industry SF₆ used for maintenance purposes

Sulfur hexafluoride (SF₆) is often used with transformers to prevent equipment from arcing. However, the global warming potential of SF₆ is 23,500 times that of CO₂ over a 100-year period (*GHG Protocol, AR5*). The industry is exploring alternatives and monitoring its use of SF₆.



Air Quality

Average air pollution
emissions in tonnes

NO_x – 3,265 t

SO_x – 5,818 t

PM₁₀ – 423 t

Mercury (Hg)– 0.025 t

Lead (Pb)– 0.033 t



Spill management

Average annual priority spills per utility
– **15.4**

Priority Spills- Petroleum spillovers of over 500L or containing PCBs over 1g; and/or, any volume of petroleum-based or PCB contaminated substance that enters a water body.

Petroleum can be used as insulation in transformers in the form of mineral oil, or the oil is burned as a backup source of energy in remote communities. Recording this information helps to predict the impact of the spill and manage proper cleanup.

93%

of our members have implemented
an EMS standard aligned or certified
with ISO 14001.



**On average our members experience
less than one incident of non-compliance
associated with environmental laws and
regulations.**

Electrification

Electricity Canada members are helping to electrify the economy through increasing EVs and heatpumps, as a few examples..



Total Greenhouse Gas Emissions (tCO2e)

Canada has a goal of net zero emissions by 2050. To reach that goal the electricity sector has been working towards reducing their Scope 1 and 2 emissions.

Scope 1 – 55,006,363

Sources of emissions that come directly from producing the electricity itself (i.e. burning natural gas to generate electricity at a power plant)

Scope 2 (Corporate/Operation, excluding T&D Line Losses) – 377, 078

Indirect emissions the utility uses for its operations (i.e. electricity purchased to run office buildings).

In 2022, the electricity sector made up only 6.7% of Canada's greenhouse gas emissions (*Environment and Climate Change Canada, 2024*).

Average Retail Electricity Rate in Canada



19.20 ¢/kwh

Residential Customers

18.67 ¢/kwh

Commercial Customers

12.83 ¢/kwh

Industrial Customers

In August 2023, Electricity Canada commissioned Power Advisory to develop an estimate of the supply costs related to decarbonization and its potential bill impacts. Based on this model by 2035.



17%

bill increase for residential customers.



21%

bill increase for commercial customers.



26%

bill increase for industrial customers**.

However, according to our research, increasing bills above 3% will be a challenge for utilities (*Electricity Canada Customer National Survey, 2022*).

Fleet Electrification

Members reported 1,727 out of 19,847 fleet vehicles have been electrified.



Average fleet size

Number of total fleet vehicles converted to i.e EV, PHEV, HEV, Dual-energy

**The costs related to electricity delivery, distribution, and transmission related costs, are not included in these estimates. If incremental network costs are incurred for the purposes of facilitating the energy transition, and if those costs increase at a rate greater than inflation, the overall bill increase will be higher than what is presented in this report.