

PLUG 'N DRIVE

Why should your
workplace care about EV?
March 10, 2020

In collaboration with:



**The Canadian Coalition
for Green Health Care**

**Coalition canadienne pour
un système de santé écologie**





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Greenhouse Gas Emissions – The Big Three



TRANSPORTATION
34%



INDUSTRY
30%



BUILDINGS
17%



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Ontario's Clean Electricity

Source: IESO

NUCLEAR = 58%



HYDRO = 23%



RENEWABLES = 9%



NATURAL GAS = 10%





OUR VISION

To be Canada's champion for electrified transportation



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EV Future: Breaking Down Barriers

OUR GOAL

Work with government and industry to increase EV sales to at least 5% of new passenger car sales by 2020.



5%

BARRIERS TO EV UPTAKE

#1

Consumer Knowledge. Education is needed about the ease, benefits and cost savings of driving electric.

#2

Range anxiety: Public and workplace charging is needed

EVs SAVE MONEY



\$2000_(approx)

ANNUAL SAVINGS ON
FUEL AND MAINTENANCE

EVs REDUCE GREENHOUSE GAS EMISSIONS



UP
TO **90%**

FEWER GREENHOUSE GAS EMISSIONS
THAN AN EQUIVALENT GAS CAR

EVs GO THE DISTANCE



1 CHARGE
PER WEEK

200+ KM OF RANGE ON A FULL CHARGE

EVs ARE FOR EVERYONE



40+

MODELS STARTING AT \$20,000
(AFTER INCENTIVES)



Electric Vehicle Discovery Centre Features

Electric Vehicle Test Drives

Home Charging Station Gallery

Electrifying History Wall

Public Charging Powered by Toronto Hydro

OPG PowerPlace Conference Centre (Brought to you by Ontario Power Generation)

Interactive Touchscreen Displays (Brought to you by the Power Workers' Union)

TD Insurance Zone

Bruce Power Coffee Bar

Plug'n Drive Head Office



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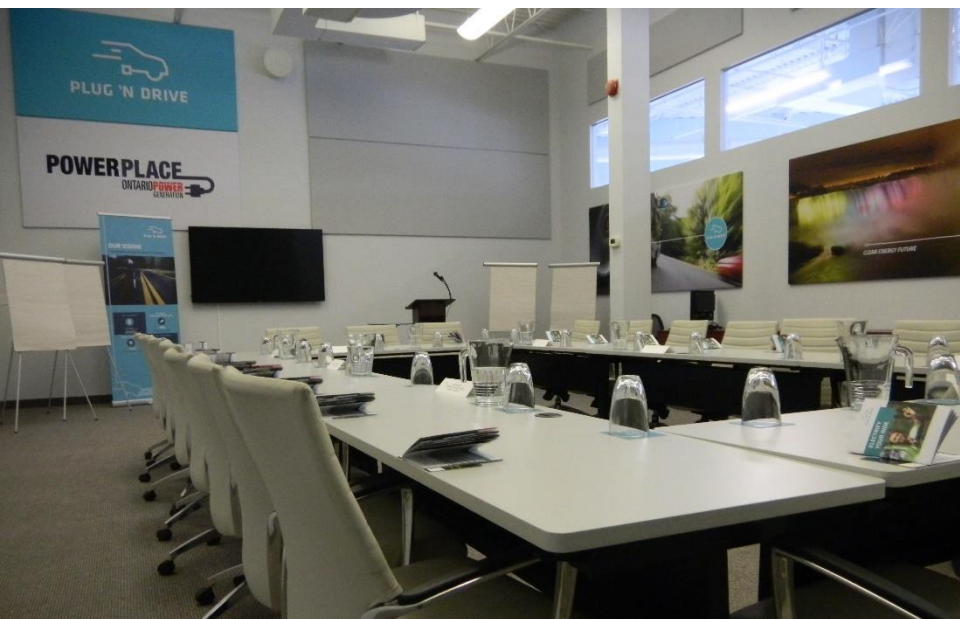
OPG PowerPlace

Sponsored by Ontario Power Generation

Premium event venue that can accommodate workshops, seminars, presentations, etc.

Seating for upwards of 150 guests

Equipped with high-definition video display, podium and webinar/conferencing tools



POWERPLACE
ONTARIO **POWER**
GENERATION



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A Recipe for Success

**PUBLIC/PRIVATE
PARTNERSHIPS**

**No pressure, sales
free, all makes and
models – ONE STOP
SHOP**

**ANCILLARY REVENUE
EVENT VENUE /
SERVICES**

**STAKEHOLDER
ENGAGEMENT – two
way referral**



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Sponsors

Discovery Sponsors



Electrifying Sponsors



Accelerator Sponsors



Electron Sponsors

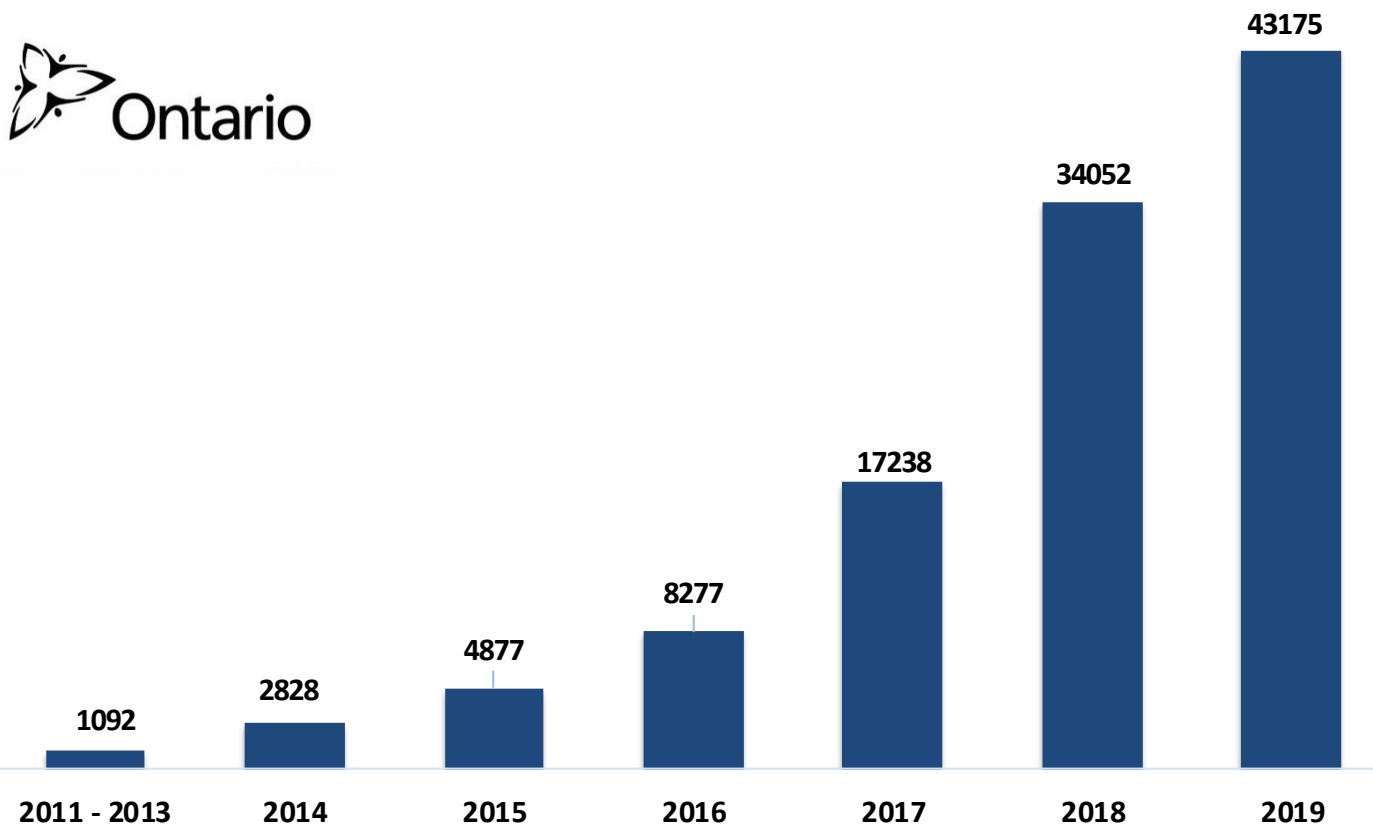


Partners



The M.H. Brigham Foundation

43,175 (est.) | 30% of Canada's Total EV Market Share
Cumulative EVs on the Road in Ontario as of Q4 2019

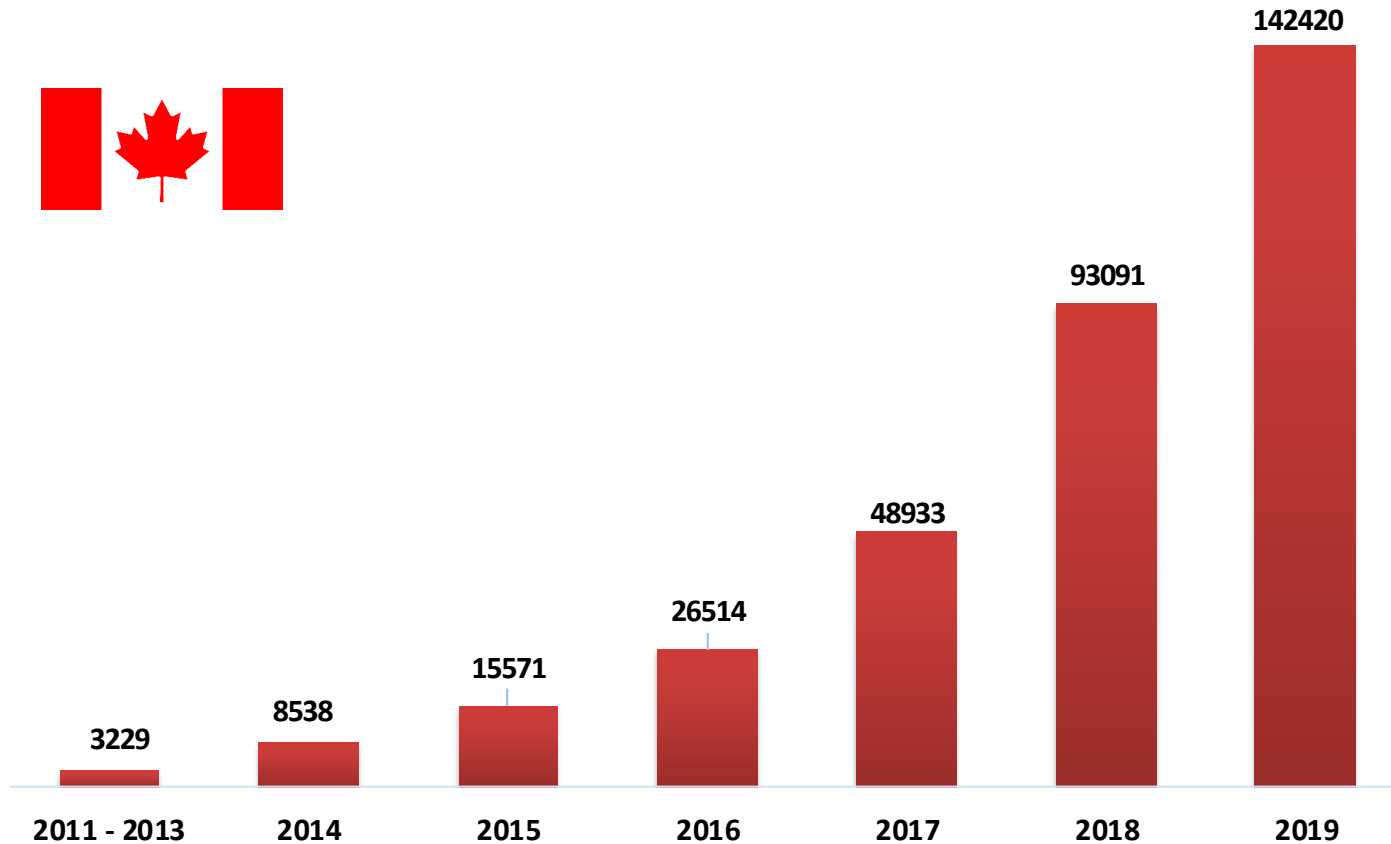


EV Sales Growth in Canada

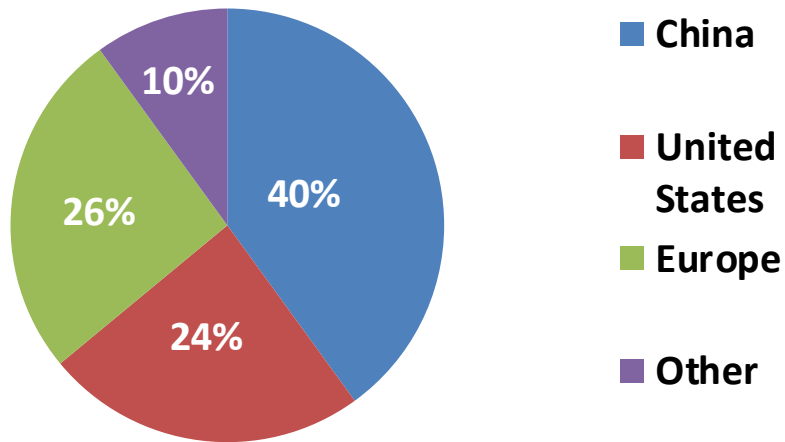
Source: Electric Mobility Canada

142,420 (est.)

Cumulative EVs on the Road in Canada as of Q4 2019



5.1 Million Electric Cars Worldwide



Source: International Energy Agency

Top 5 EV Countries

China (39.5%)

United States (24.5%)

Japan (6.6%)

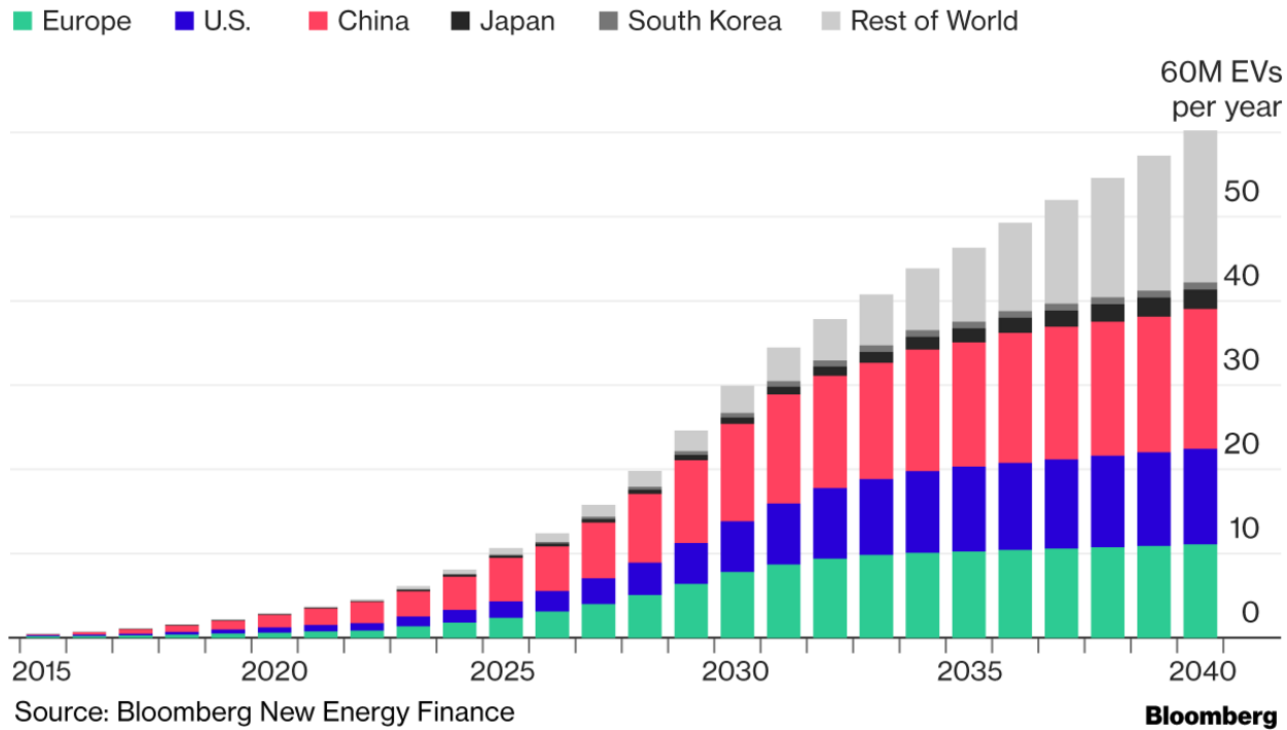
Norway (5.7%)

United Kingdom (4.3%)

The Global Electric Car Fleet Has Reached **5.1 Million**

Global Electric-Car Revolution Set to Take Off

China set to lead EV market



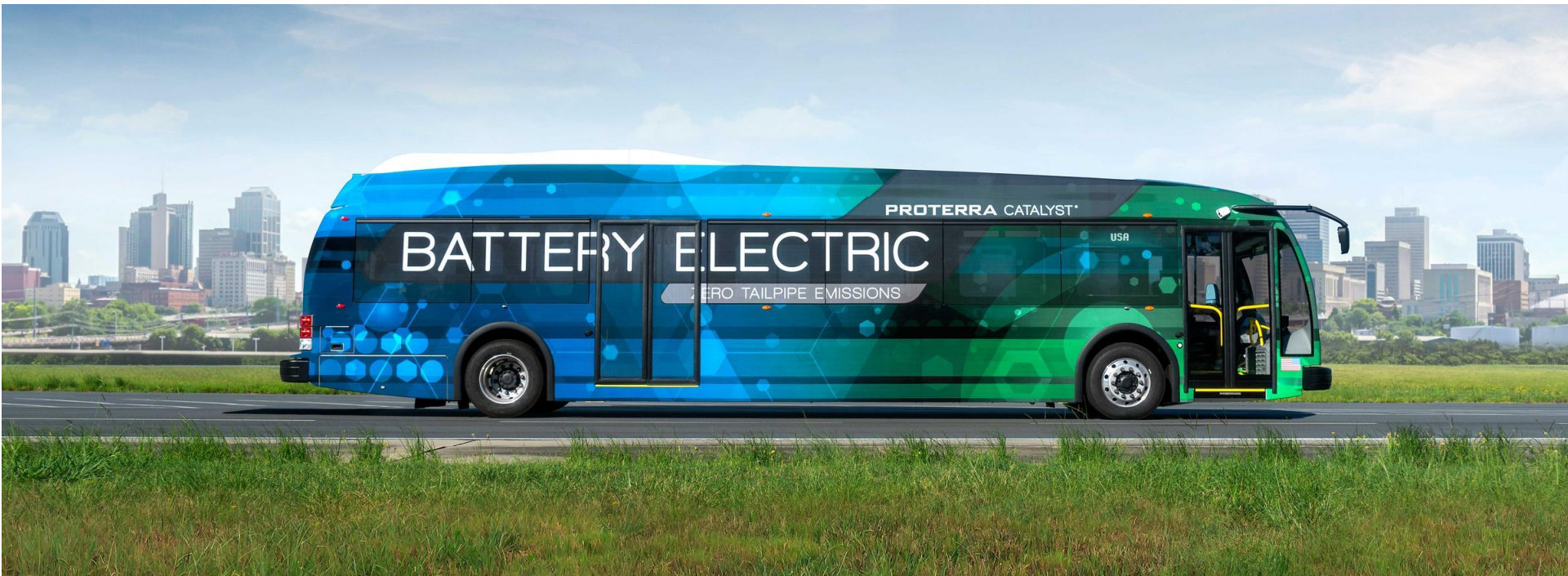
Electric Transit Opportunities

The Province of Ontario invested \$13 million in an electric school bus pilot project

14 Electric Buses are beginning service in 2019 in York Region and Brampton

Edmonton Transit and TransLink (Vancouver) both with pilot programs

TTC is purchasing 60 electric buses in 2019-2020



Wolfe Island Electric Ferry – Canada's First!

-BC Ferries have added electric to their fleet too



New Federal incentive announced March 19, 2019:

- **\$5000** Incentive on EV under \$45k
- **Funding for infrastructure**
- **Tax write off for business adding EV to fleet**





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**Clean Air
Partnership**

USED EV INCENTIVE PROGRAM

**Receive \$1,000 when you buy a used
fully electric or plug-in hybrid electric car**

Attend a Used EV seminar, take an EV test drive and purchase
a used EV to get \$1,000 off your purchase. This program stacks
with the **Scrappage Incentive** program on the reverse
of this postcard.

To accelerate your drive to EV ownership, visit:
plugndrive.ca/usedelectricvehicles

This program is made possible thanks to the support of the M. H. Brigham Foundation.



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**Clean Air
Partnership**

SCRAPPAGE INCENTIVE PROGRAM

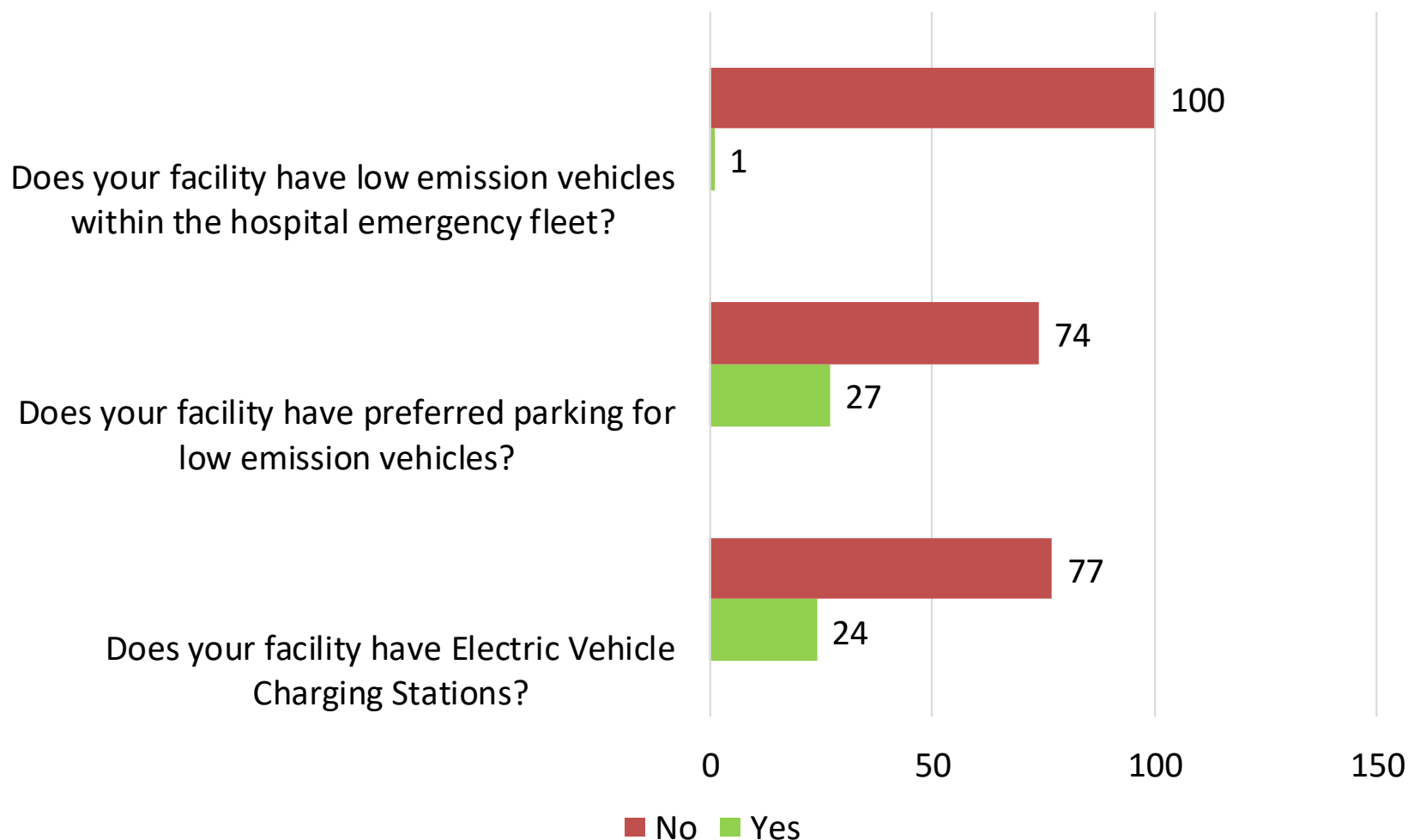
**Scrap your old gas car and receive
\$1,000**

**Scrap your old gas car with carheaven.ca and select
"pndscrappage" from the list to claim an additional
\$1,000 when you apply to the Used EV Incentive
program on the reverse of this postcard.**

**To make the switch to an electric car,
visit: plugndrive.ca/usedelectricvehicles**

**This program is made possible thanks to the support of the
M. H. Brigham Foundation.**

Electric Vehicle Infrastructure – 2017 data, 101 Participants



Why is Workplace Charging so Important?

- 2nd most important charging location (after home)
- Employees are 6x more likely to adopt EV if chargers at work (Calif. Study)
- Makes EV possible for garage orphans
- Employee engagement/attract and retain talent
- Help your organization achieve its climate change resiliency preparedness goals
- Not just an environmental issue, but also a health issue!





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Lead the Charge

2020 Guide to Workplace Charging

Comprehensive Guide to Help Businesses Prepare for and Install Workplace Charging

Includes:

- Reasons to invest
- How to assess your workplace's demand for EV charging
- Policy considerations
- How to select the right charging equipment
- Installation considerations
- Cost considerations and pay-per-use payment models
- Operation and maintenance considerations

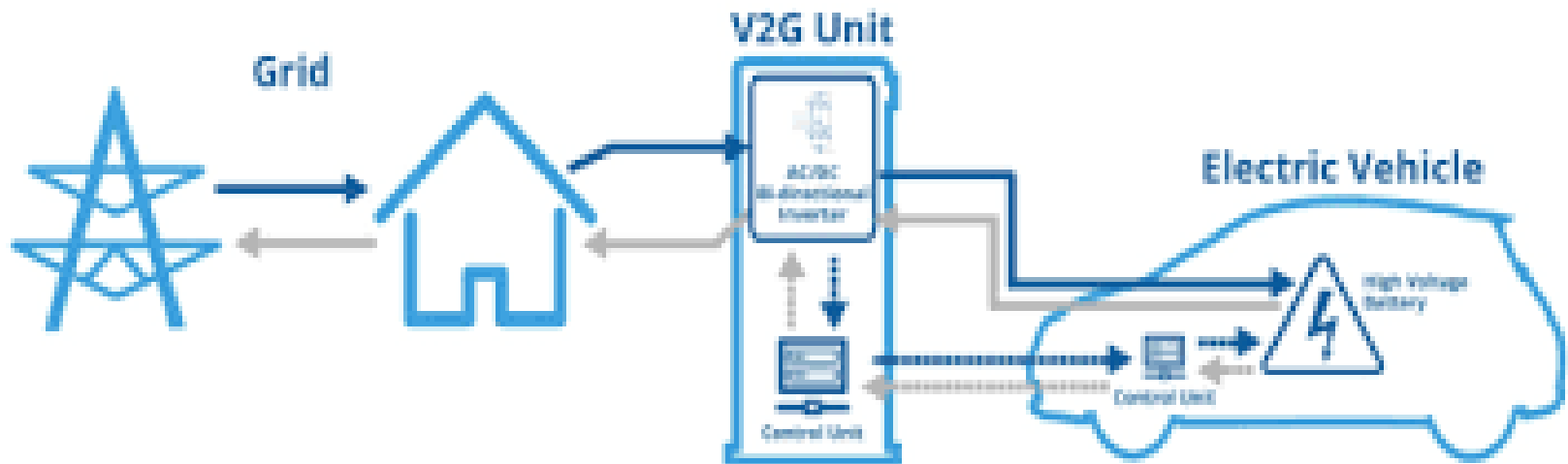
Interested?

E-mail info@plugndrive.ca



Vehicle to Grid or 'V to X'

- This exists! Developing market
- Used EV batteries for storage (or storage in the vehicles)
- Used EV batteries to back up charging stations (microgrid)
- Not just emission reductions, but climate adaptation/resilience



EVS – NOT 'IF', BUT 'WHEN'

Canada launches the country's first national EV incentive

Petro-Canada to build a coast-to-coast fast charging network

EV sales projected to account for 57% of all passenger vehicle sales by 2040

Electric vehicle sales reach 5.1 million worldwide

Global automakers to invest \$300 billion in EV development over the next 5-10 years

EV prices to match internal combustion engines by mid-2020



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Thank you!



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