

PLUG 'N DRIVE

CIPMM
FLEET WORKSHOP

November, 2019





PLUG 'N DRIVE

Greenhouse Gas Emissions – The Big Three

A photograph of a busy city street with a traffic jam. A white bus is in the foreground on the left, and various cars are lined up in the lanes. The scene is captured from a slightly elevated angle.

TRANSPORTATION
34%

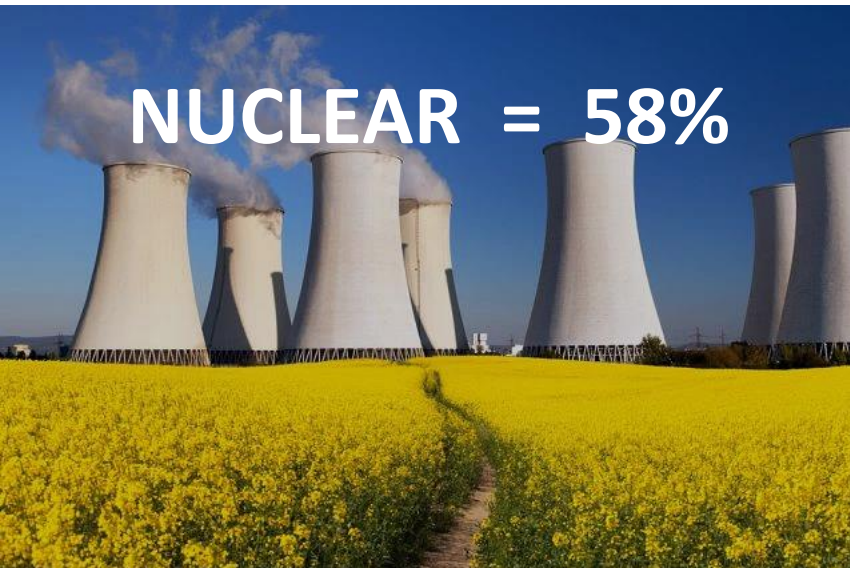
A photograph of a large industrial facility, possibly a refinery or chemical plant. It features complex piping, large storage tanks, and tall distillation columns under a clear blue sky.

INDUSTRY
30%

A high-angle photograph of a dense urban skyline, likely New York City. Numerous skyscrapers and buildings are visible, packed closely together.

BUILDINGS
17%

NUCLEAR = 58%



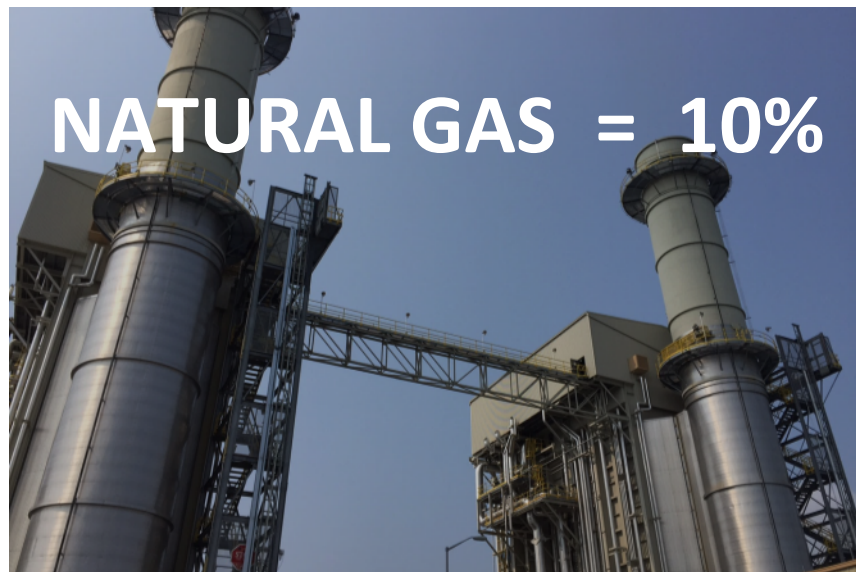
HYDRO = 23%



RENEWABLES = 9%



NATURAL GAS = 10%





OUR VISION

To be Canada's champion for electrified transportation



PLUG 'N DRIVE

EV Future: Breaking Down Barriers

OUR GOAL

Work with government and industry to increase EV sales to 5% of new passenger car sales by 2020. Currently, EVs represent ALMOST 4%!!



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



PLUG 'N DRIVE

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



PLUG 'N DRIVE

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**

ELECTRIC VEHICLE DISCOVERY CENTRE



APRIL 2017 to SEPTEMBER 2019

OF TEST DRIVES

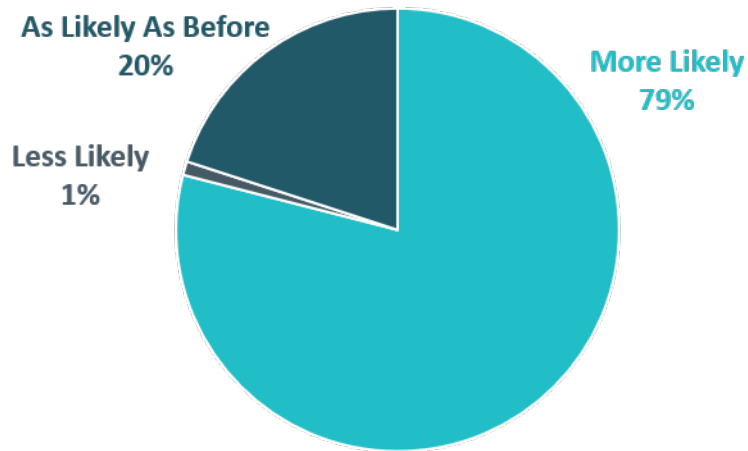
8,470+



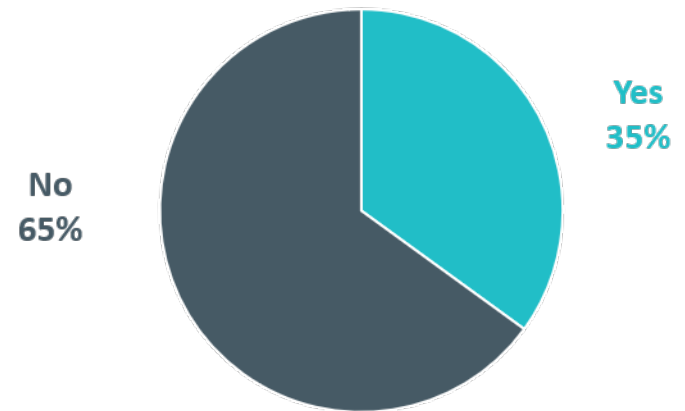
OF VISITORS

21,810+

Percentage of Visitors That Are More Likely to Purchase an EV

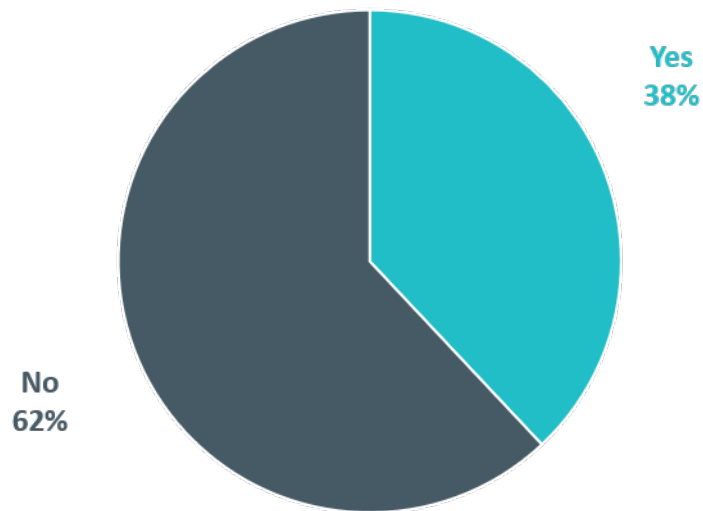


Percentage of Visitors that Opt-In to Receive Communication from an Auto Manufacturer

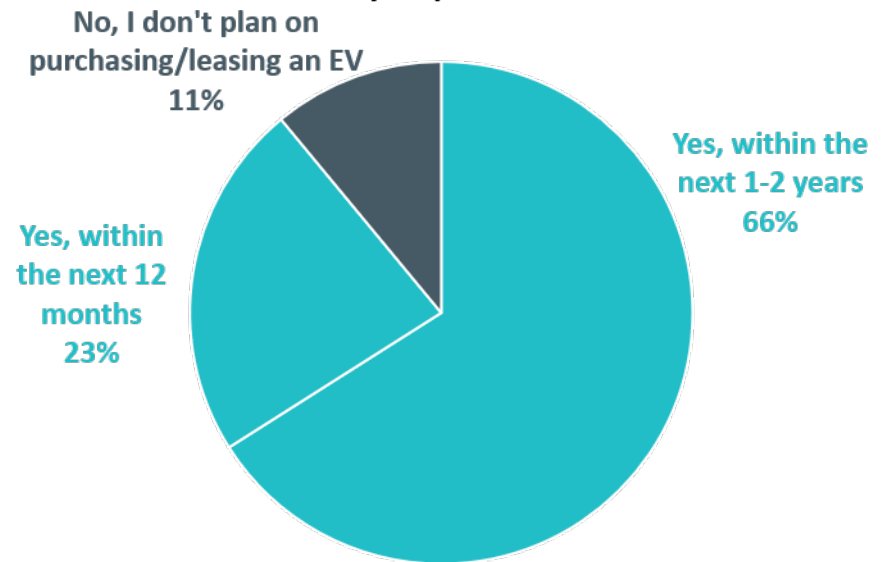


EV DISCOVERY CENTRE VISITOR FEEDBACK

Have You Purchased/Leased an EV Since Your Last Visit?



If You Have Not Purchased/Leased an EV, do you plan to?



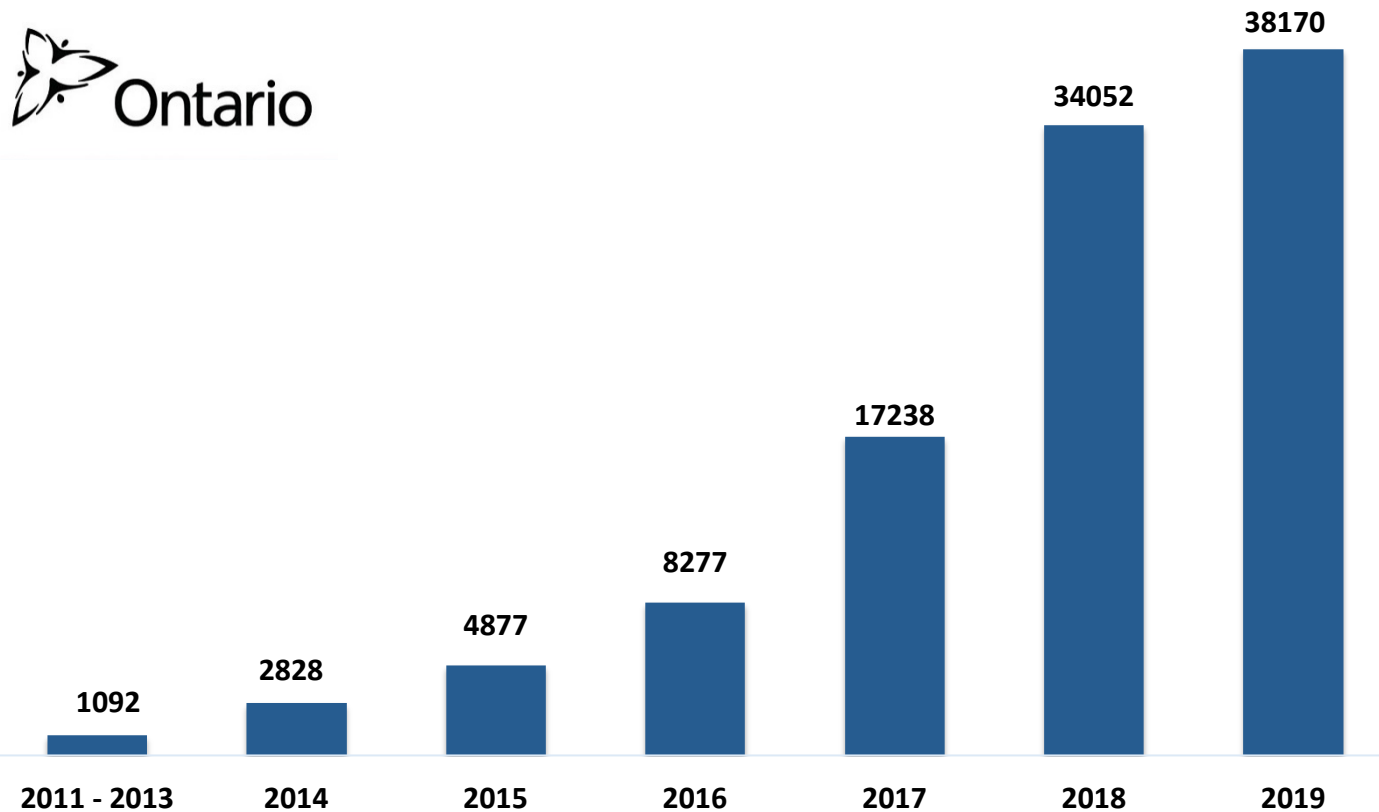
Sample Size: 242

EV Sales Growth in Ontario

Source: Electric Mobility Canada

38,170 (est.)

Cumulative EVs on the Road in Ontario as of August 31, 2019

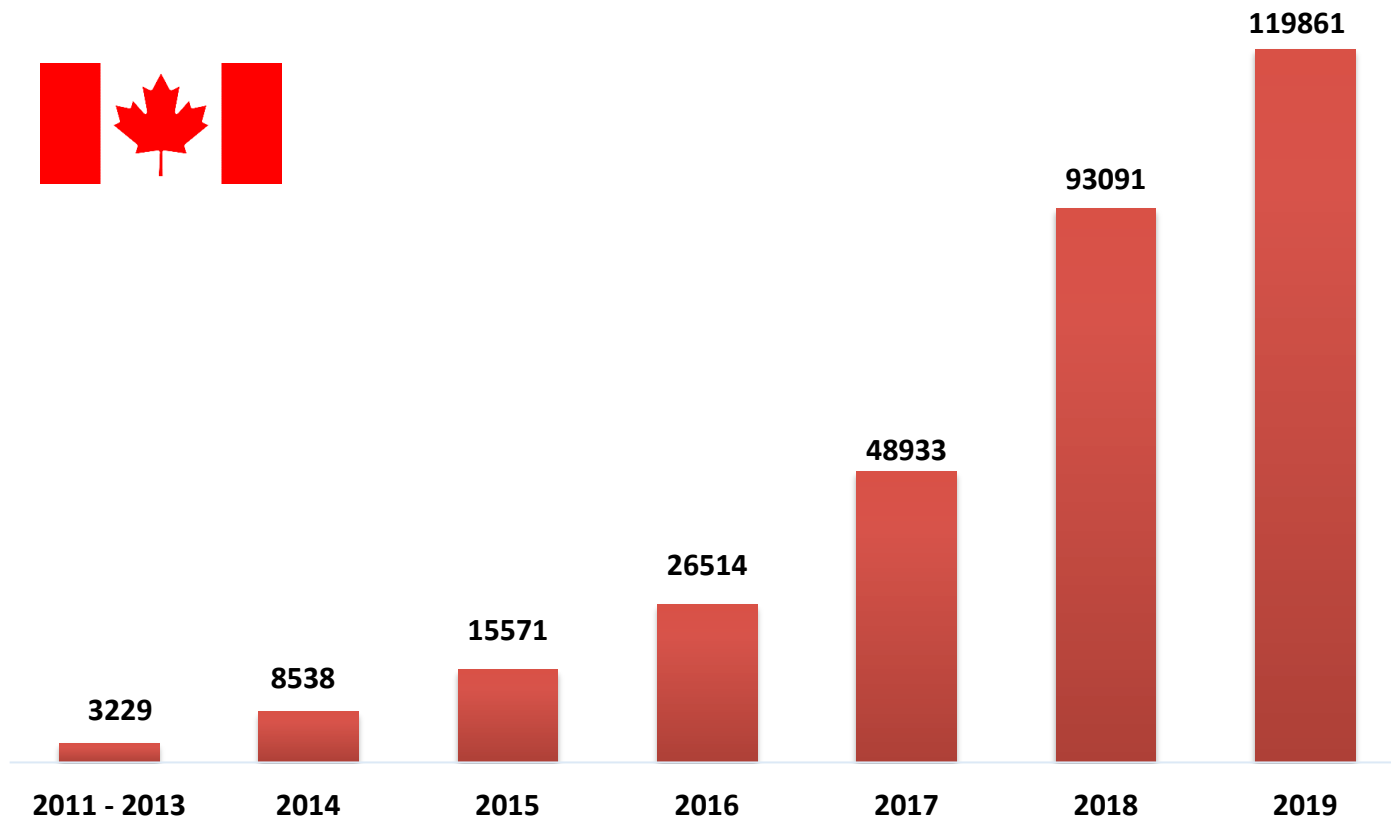


EV Sales Growth in Canada

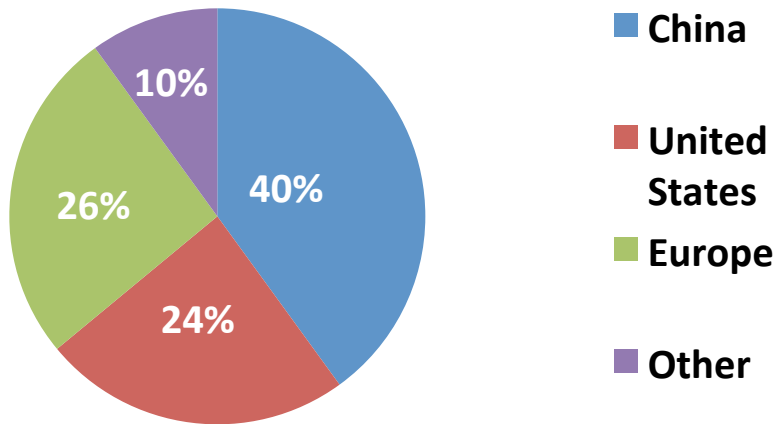
Source: Electric Mobility Canada

119,861 (est.)

Cumulative EVs on the Road in Canada as of August 31, 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%)

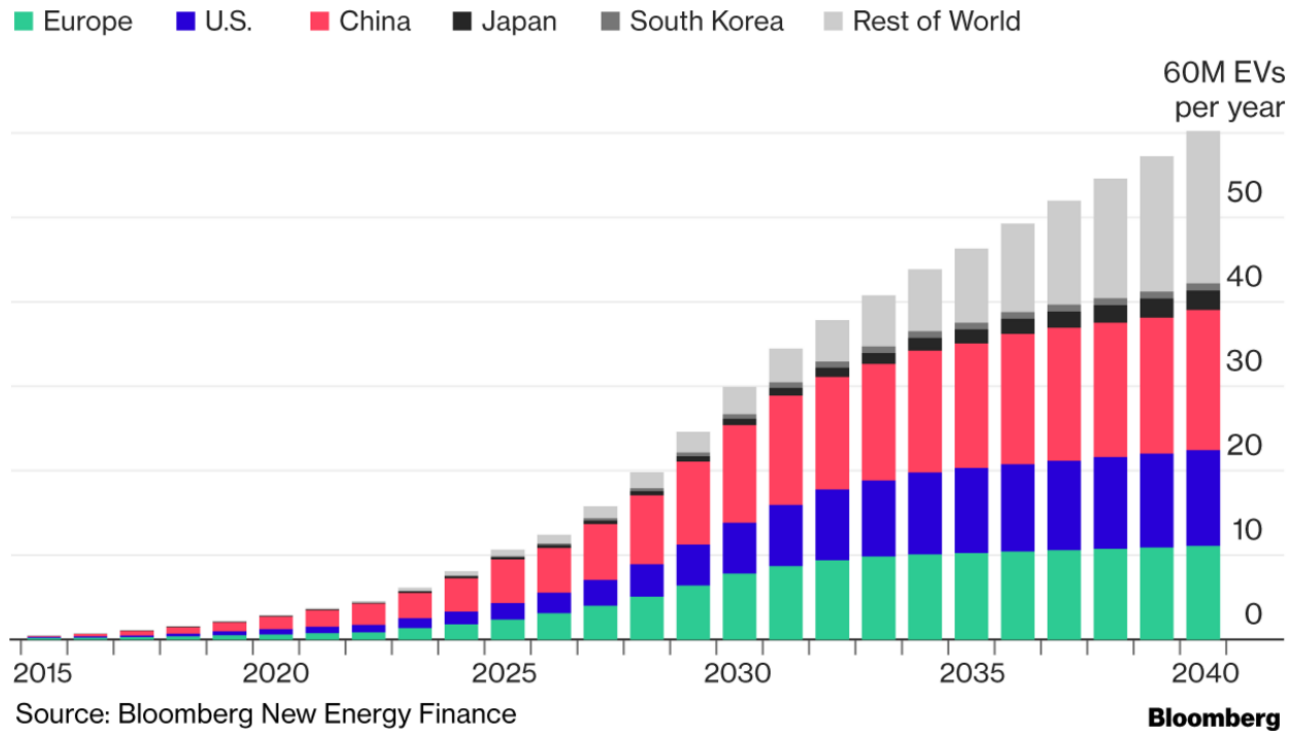
Norway (5.7%)

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



THE BENEFITS OF ELECTRIC FLEETS

REDUCE COSTS

AS MUCH AS **88%*** LESS
ON FUEL AND
MAINTENANCE PER
VEHICLE

MEET SUSTAINABILITY TARGETS

AS MUCH AS **92%*** LESS
GREENHOUSE GAS
EMISSIONS

POSITION YOUR COMPANY

AS A LEADER IN
ELECTRIC VEHICLE
ADOPTION

***Source: FleetWise EV300 – The Atmospheric Fund**



CONSIDERATIONS

DUTY CYCLE – Match the vehicle to the use

CHARGING – What kind of charging stations to install (Level 1, 2, 3), where to install them and best time to charge

STAFF TRAINING – How to maximize driving range, how to charge, where to charge



THE ADVANTAGE OF TELEMATICS

KNOWING THE STATE OF CHARGE

- Enables dispatchers to send the right vehicle for the right task

ROUTE TRACKING

- Provides real-time data on the position of fleet vehicles and the estimated arrival time

MONITORING CHARGING

- Allows charging sessions to be controlled based on time-of-use pricing and can produce energy usage reports

GREENING OPERATIONS

- Controlling the routes, times of charging and vehicle used for the task means limiting the environmental impact of fleet operations

Not sure where to start? Plug'n Drive can help:

- **Training for your team**
- **Assistance with infrastructure at your facility – potential for funding**
- **Potential tax write off for business adding EV to fleet**



Used EV Incentive - \$1000!!



- Take our seminar, take a test drive, qualify for \$1000 off a used EV!
- E-mail info@plugndrive.ca for more details and to join the list
- Launched April 14th – loads of interest! 150 incentives given so far...

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



PLUG 'N DRIVE

Thank you!



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