### ELECTRIFY YOUR RIDE



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# Plug'n Drive Thanks Our 2017 EV Roadshow Sponsor

# ONTARIO POWER GENERATION

Ontario's Largest Clean Energy Provider



#### **Towards a Lower Carbon Future**

In 2014, OPG burned its last piece of coal to make electricity.

This was, and continues to be, the largest single action to combat climate change in North America.

Today, we provide about half of the electricity used in Ontario and our power is more than 99 per cent free of smog and greenhouse gas emissions.

We're proud of this achievement, and we believe using clean electrons to power our cars, trains and buses is the next big climate change victory for Ontario.

To this end, OPG has developed an electrification strategy, which supports the province in reaching its Climate Change Action Plan goals.

#### www.opg.com

## **EVs Save Money**



\$1,900

ANNUAL SAVINGS ON FUEL AND MAINTENANCE

Up to \$15,000

AVAILABLE IN GOVERNMENT INCENTIVES

### **EVs Go The Distance**



200+ km
ON A SINGLE CHARGE

Fully Charge
AT HOME OVERNIGHT

### **EVs Reduce Emissions**



Up to 90%
FEWER EMISSIONS
THAN A GAS CAR

## **EVs Are For EVeryone**



25+ Models
AT EVERY PRICE POINT

## All Shapes and Sizes

COMPACT, SUB-COMPACT, FULL SIZE MINIVAN, SUV, SPORTS UTILITY

## FULLY ELECTRIC CARS

- Only Use Electricity!
- Zero Tailpipe Emissions!
- Cheap to Operate and Maintain!

- BMW i3
- Chevrolet BOLT
- Ford Focus Electric
- Hyundai IONIQ Electric
- Kia Soul Electric
- Mitsubishi i-MiEV
- Nissan LEAF
- Tesla Model S
- Tesla Model X
- Volkswagen e-Golf

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The following pages include a cost to drive and emissions comparison between an electric car and a gas car equivalent. All data is calculated by Plug'n Drive with these variables:

- NRCan's 2017 Fuel Efficiency Figures
- A gasoline price of \$1.05/Litre
- Ontario's off-peak electricity rates
- Ontario's off-peak electricity generation mix
- An average annual driving distance of 20,000 km
- All values have been rounded to the nearest 10



**i3** 

Electric Range 183 km \$47,500 Starting MSRP | Before Taxes

> - \$13,000 Ontario Incentive

Annual Charge Cost

\$450 vs. \$1,900 - Gas Car (Subcompact) **Annual Emissions** 

300 kg

4,400 kg - Gas Car (Subcompact)

Full Charge From Empty L1 (Wall Outlet) - 23 Hours L2 (Charging Station) - 5 Hours L3 (Quick Charger) - 40 Minutes



\$42,895

Starting MSRP | Before Taxes

UP TO - \$14,000
Ontario Incentive



**BOLT** 

Electric Range 383 km

**Annual Charge Cost** 

\$450 vs. \$1,800 - Gas Car (Station Wagon) **Annual Emissions** 

300 kg vs.

4,000 kg - Gas Car (Station Wagon)

Full Charge From Empty L1 (Wall Outlet) - 42 Hours L2 (Charging Station) - 9.5 Hours L3 (Quick Charger) - 1 Hour





**\$31,498**Starting MSRP | Before Taxes

Focus Electric - \$

Electric Range 185 km - \$14,000

Ontario Incentive

**Annual Charge Cost** 

\$570 vs. \$1,870 - Gas Car (Compact) **Annual Emissions** 

320 kg vs. 4,400 kg - Gas Car (Compact)

Full Charge From Empty L1 (Wall Outlet) - 23 Hours L2 (Charging Station) - 5.5 Hours L3 (Quick Charger) - 30 Minutes



**TBD** 

Starting MSRP | Before Taxes

- \$14,000 Ontario Incentive



**IONIQ Electric** 

Electric Range 170 km

**Annual Charge Cost** 

\$430 vs. \$2,170 - Gas Car (Midsize) **Annual Emissions** 

260 kg vs. 4,860 kg - Gas Car (Midsize)

Full Charge From Empty L1 (Wall Outlet) - 19 Hours L2 (Charging Station) - 4.5 Hours L3 (Quick Charger) - 35 Minutes





**Soul Electric** 

Electric Range 150 km \$35,395 Starting MSRP | Before Taxes

- \$14,000

Ontario Incentive

**Annual Charge Cost** 

\$570

\$1,720 - Gas Car (Station Wagon) **Annual Emissions** 

320 kg

vs.

4,040 kg - Gas Car (Station Wagon)

Full Charge From Empty L1 (Wall Outlet) - 19 Hours L2 (Charging Station) - 4 Hours L3 (Quick Charger) - 25 Minutes



\$27,998
Starting MSRP | Before Taxes

\$10,000

Ontario Incentive



i-MiEV

Electric Range 100 km

**Annual Charge Cost** 

\$530

\$1,910 - Gas Car (Subcompact) **Annual Emissions** 

300 kg

4,480 kg - Gas Car (Subcompact)

Full Charge From Empty L1 (Wall Outlet) - 11 Hours L2 (Charging Station) - 7 Hours L3 (Quick Charger) - 20 Minutes





**LEAF** 

Electric Range 172 km \$32,698 Starting MSRP | Before Taxes

\$14,000

Ontario Incentive

**Annual Charge Cost** 

\$530

vs. \$2,070 - Gas Car (Midsize) **Annual Emissions** 

300 kg

VS.

4,860 kg - Gas Car (Midsize)

Full Charge From Empty L1 (Wall Outlet) - 21 Hours L2 (Charging Station) - 6 Hours L3 (Quick Charger) - 30 Minutes



\$92,500

Starting MSRP | Before Taxes

- \$14,000

Ontario Incentive

TESLA

Model S

**Electric Range** 

60 kWh: 338 km 75 kWh: 400 km

90 kWh: 473 km 100 kWh: 507 km

**Annual Charge Cost** 

\$640

vs. \$2,490 - Gas Car (Full Size) **Annual Emissions** 

360 kg

4,880 kg - Gas Car (Full Size)

Full Charge From Empty L1 (Wall Outlet) - 42 Hours L2 (Charging Station) - 10 Hours L3 (Quick Charger) - 1 Hour



#### TESLA

#### Model X

Electric Range 75 kWh: 381 km 90 kWh: 413 100 kWh: 475 km \$116,200

Starting MSRP | Before Taxes

- \$14,000

Ontario Incentive

**Annual Charge Cost** 

\$660

vs. \$2,460 - Gas Car (SUV) **Annual Emissions** 

380 kg

vs. 5,780 kg - Gas Car (SUV)

Full Charge From Empty L1 (Wall Outlet) - 52 Hours L2 (Charging Station) - 12 Hours L3 (Quick Charger) - 1 Hour



\$36,000 Starting MSRP | Before Taxes

- \$14,000

Ontario Incentive



Electric Range 201 km

**Annual Charge Cost** 

\$480

vs. \$1,870 - Gas Car (Compact) **Annual Emissions** 

280 kg

4,400 kg - Gas Car (Compact)

Full Charge From Empty L1 (Wall Outlet) - 25 Hours L2 (Charging Station) - TBD L3 (Quick Charger) - 45 Minutes



## FULLY ELECTRIC CARS

**COMING SOON!** 





Tesla Model 3





smart fortwo Electric (Redesigned)

## **NOTES**

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## FULLY CHARGE YOUR EV With a Home Charging Station

- Cuts charging time down
- Similar to a clothes dryer plug at 240V
- Easy to install
- \$800-\$1,200 to buy
- Government incentives offer up to \$1,000 off purchase and installation

#### VISIT CHARGEMYCAR.CA

- Choose from Canada's largest selection
- **Buy** through the online store
- Find an electrician for the installation





### CHARGE AT ONE OF CANADA'S 4,000+ STATIONS AT 3,000+ LOCATIONS

Level 2

Top-up your EV while shopping or dining

Level

Fully charge your EV in 20-40 minutes

### ONTARIO'S CHARGING INFRASTRUCTURE

In 2016, the Province of Ontario invested \$20 million in public charging stations, including **274 Level 2** and **211 Level 3**.

## FIND A CHARGING STATION NEAR YOU WITH THESE MOBILE APPS

Charge Hub





## PLUG-IN HYBRID ELECTRIC CARS

- Use Electricity and Gas!
- Have Electric Only Driving Modes!
- Cheaper to Operate Than Hybrid Cars!

The following pages include a cost to drive and emissions comparison between a plug-in hybrid electric car and a gas car equivalent. All data is calculated by Plug'n Drive with these variables:

- NRCan's 2017 Fuel Efficiency Figures
- The first 20-80 km (depending on model) of every 100 km trip is assumed to be fully electric with the remaining distance assumed to be gasoline
- A gasoline price of \$1.05/Litre
- Ontario's off-peak electricity rates
- Ontario's off-peak electricity generation mix
- An average annual driving distance of 20,000 km
- All values have been rounded to the nearest 10

- Audi A3 Sportback e-tron
- BMW i3 REX
- BMW i8
- BMW 330e
- BMW 740Le xDrive
- BMW X5 xDrive 40e
- Chevrolet VOLT
- Chrysler Pacifica PHEV
- Ford C-Max Energi
- Ford Fusion Energi
- Hyundai IONIQ PHEV
- Hyundai Sonata PHEV
- Kia Optima PHEV
- Mercedes GLE 550e
- Mercedes S 550e
- Porsche Cayenne S E Hybrid
- Porsche Panamera S E Hybrid
- Volvo XC90 T8 Twin-Engine





A3 Sportback e-tron

> Electric Range 26 km

Gasoline Range 579 km \$45,900

Starting MSRP | Before Taxes

**UP TO** 

- \$8,095

Ontario Incentive

Annual Charge/Fuel Cost

\$1,220

vs. \$1,970 - Gas Car (Compact) **Annual Emissions** 

280 kg

vs. 4,400 kg - Gas Car

(Compact)

Full Charge L1 (Wall Outlet) - 6 Hours From Empty L2 (Charging Station) - 2.5 Hours



\$52,000

Starting MSRP | Before Taxes

- \$13,000
Ontario Incentive



i3 REX

Electric Range 156 km

Gasoline Range 129 km

Annual Charge/Fuel Cost

\$680

vs. \$1,800 - Gas Car (Subcompact) **Annual Emissions** 

920 kg

4,040 kg - Gas Car (Subcompact)

Full Charge From Empty L1 (Wall Outlet) - 23 Hours L2 (Charging Station) - 5 Hours L3 (Quick Charger) - 35 Minutes





**i8** 

24 km

**Gasoline Range** 

509 km

\$149,800 Starting MSRP | Before Taxes

IID TO

\$3,000 Ontario Incentive

**Annual Charge/Fuel Cost** 

\$1,510

vs. \$ 3,050 Gas Car (Sports Car) **Annual Emissions** 

3,100 kg

VS.

6,840 kg - Gas Car (Sports Car)

Full Charge L1 (Wall Outlet) - 6 Hours From Empty L2 (Charging Station) - 2 Hours



\$52,100 Starting MSRP | Before Taxes

- \$7,730
Ontario Incentive



330e

Electric Range 23 km

Gasoline Range 557 km

**Annual Charge/Fuel Cost** 

\$1,380

VS.

\$1,970 Gas Car (Compact) **Annual Emissions** 

2,780 kg

VS.

4,400 kg - Gas Car (Compact)

Full Charge L1 (Wall Outlet) - 6 Hours From Empty L2 (Charging Station) - 2 Hours





\$107,900 Starting MSRP | Before Taxes \$74,000 Starting MSRP | Before Taxes

X5 xDrive 40e

- \$8,460

Ontario Incentive

Electric Range

Gasoline Range 846 km

23 km

Gasoline Range 525 km

**Annual Charge/Fuel Cost** 

\$1,430

vs. \$2,180 Gas Car (Full-Size) Annual Emissions

-\$3,000

Ontario Incentive

**UP TO** 

3,160 kg vs. 4,880 kg - Gas Car (Full-Size) **Annual Charge/Fuel Cost** 

\$2,070

VS.

\$2,460 Gas Car (SUV) **Annual Emissions** 

3,720 kg

VS.

**5,780 kg - Gas Car** (SUV)

Full Charge L1 (Wall Outlet) - 6 Hours From Empty L2 (Charging Station) - 3 Hours Full Charge L1 (Wall Outlet) - 6 Hours From Empty L2 (Charging Station) - 3 Hours







\$38,590 Starting MSRP | Before Taxes

- \$14,000

Ontario Incentive

Annual Charge/Fuel Cost

**Gasoline Range** 

590 km

\$650

VS.

\$1,870 Gas Car (Compact) **Annual Emissions** 

680 kg

VS.

4,400 kg - Gas Car (Compact)

Full Charge L1 (Wall Outlet) - 13 Hours From Empty L2 (Charging Station) - 4.5 Hours



\$56,495

Starting MSRP | Before Taxes

- \$14,000 Ontario Incentive



#### **Pacifica PHEV**

Electric Range 53 km

Gasoline Range 858 km

**Annual Charge/Fuel Cost** 

\$1,090

VS.

\$2,600 Gas Car (Minivan) **Annual Emissions** 

1,860 kg

VS.

5,820 kg - Gas Car (Minivan)

Full Charge L1 (Wall Outlet) - 11 Hours From Empty L2 (Charging Station) - 2.5 Hours





**Go Further** 

C-Max Energi

Electric Range 33 km

Gasoline Range 884 km \$29,328
Starting MSRP | Before Taxes

- \$7,730

Ontario Incentive

**Annual Charge/Fuel Cost** 

\$1,020

VS.

\$2,066 Gas Car (Mid-Size) **Annual Emissions** 

2,060 kg

VS.

4,860 kg - Gas Car (Mid-Size)

Full Charge L1 (Wall Outlet) - 5 Hours From Empty L2 (Charging Station) - 2.5 Hours



\$32,088
Starting MSRP | Before Taxes

- \$7,730

Ontario Incentive

**Ford**Go Further

**Fusion Energi** 

Electric Range 35 km

Gasoline Range 808 km

**Annual Charge/Fuel Cost** 

\$1,020

VS.

\$2,070 Gas Car (Mid-Size) **Annual Emissions** 

2,060 kg

VS.

4,860 kg - Gas Car (Mid-Size)

Full Charge L1 (Wall Outlet) - 5 Hours From Empty L2 (Charging Station) - 2.5 Hours





Electric Range

Gasoline Range TBD **TBD** 

Starting MSRP | Before Taxes

- \$8,460 Ontario Incentive

Annual Charge/Fuel Cost

\$656

VS.

\$2,170 Gas Car (Mid Size) **Annual Emissions** 

1,100 kg

VS.

4,860 kg - Gas Car (Mid Size)

Full Charge L1 (Wall Outlet) - 6 Hours From Empty L2 (Charger) - TBD



\$43,999 Starting MSRP | Before Taxes

> - \$8,460 Ontario Incentive



**Sonata PHEV** 

Electric Range 43 km

Gasoline Range 901 km

**Annual Charge/Fuel Cost** 

\$1,060

VS.

\$1,872 Gas Car

**Annual Emissions** 

2,160 kg

VS.

4,400 kg - Gas Car

Full Charge L1 (Wall Outlet) - 7 Hours From Empty L2 (Charger) - 3 Hours





**TBD** 

Starting MSRP | Before Taxes

#### Kia Optima

**Gasoline Range** 935 km

**UP TO** 

- \$8,460 Ontario Incentive

**Annual Charge/Fuel Cost** 

\$928

VS.

\$1.870 Gas Car (Mid-Size)

**Annual Emissions** 

2,300 kg

VS.

4,400 kg - Gas Car (Mid-Size)

L1 (Wall Outlet) - 7 Hours **Full Charge** L2 (Charging Station) - 3 Hours From Empty



\$83,000 Starting MSRP | Before Taxes

> UP TO - \$3,000

Ontario Incentive

**Annual Charge/Fuel Cost** 

\$2,094

\$2,456 Gas Car (SUV)

Mercedes-Benz

**GLE 550e** 

**Gasoline Range** 719 km

**Annual Emissions** 

4,320 kg

VS.

5,780 kg - Gas Car (Full-Size)

Full Charge L1 (Wall Outlet) - 6 Hours From Empty L2 (Charging Station) - 2 Hours





\$117,900

Starting MSRP | Before Taxes

S 550e

Electric Range 23 km

Gasoline Range 702 km **UP TO** 

- \$3,000

Ontario Incentive

**Annual Charge/Fuel Cost** 

\$1,690

VS.

\$2,180 Gas Car (Full Size) **Annual Emissions** 

3,400 kg

VS.

4,880 kg - Gas Car (Full Size)

Full Charge From Empty L1 (Wall Outlet) - 6 Hours L2 (Charging Station) - 3 Hours



\$92,100 Starting MSRP | Before Taxes

- \$3,000

Ontario Incentive



Cayenne S E Hybrid

Electric Range 23 km

Gasoline Range 768 km

Annual Charge/Fuel Cost

\$1,750

VS.

\$2,460 Gas Car (SUV) **Annual Emissions** 

2,920 kg

VS.

5,780 kg - Gas Car (SUV)

Full Charge L1 (Wall Outlet) - 7.5 Hours From Empty L2 (Charging Station) - 3 Hours





\$106,000 Starting MSRP | Before Taxes

**UP TO** 

- \$3,000

Ontario Incentive

**Gasoline Range** 875 km

**Annual Charge/Fuel Cost** 

\$1,490

VS.

\$2,480 Gas Car (Full Size)

**Annual Emissions** 

2,920 kg

VS.

4,860 kg - Gas Car (Full Size)

Full Charge L1 (Wall Outlet) - 6.5 Hours From Empty L2 (Charging Station) - 2 Hours



\$78,450 Starting MSRP | Before Taxes

- \$3,000

Ontario Incentive

UP TO

**Annual Charge/Fuel Cost** 

\$1,640

\$2,460 Gas Car (SUV)

XC90 T8 Twin-Engine

**Gasoline Range** 529 km

**Annual Emissions** 

3,380 kg

VS.

5,780 kg - Gas Car (SUV)

L1 (Wall Outlet) - 6.5 Hours **Full Charge** L2 (Charging Station) - 2.5 Hours From Empty



## PLUG-IN HYBRID ELECTRIC CARS

**COMING SOON!** 





**BMW 530e** 





**Cadillac CT6 PHEV** 





Karma Revero





Mitsubishi Outlander PHEV





**Toyota Prius Prime** 

## PLUG-IN HYBRID ELECTRIC CARS

**COMING SOON!** 



Plug'n Drive is a non-profit organization committed to accelerating the adoption of electric vehicles in order to maximize their environmental and economic benefits.

www.plugndrive.ca

#### **OUR FOUR PILLARS**



## PUBLIC EDUCATION AND OUTREACH

Tradeshows
Conferences
Employee Engagement Programs



## CHARGING STATION INFRASTRUCTURE

Residential Commercial Office



#### **INDUSTRY RESEARCH**

EV Cost to Drive EV Emissions Profiles EV sales by Province by Year



#### **GOVERNMENT POLICY**

Municipal Provincial Federal

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#### **DISCOVERY SPONSORS**









#### **ELECTRIFYING SPONSORS**





### **CONNECT WITH US**

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- @PlugN\_Drive
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1126 Finch Ave. W. [Unit 1] | North York, ON

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### Discover your electric car today!

