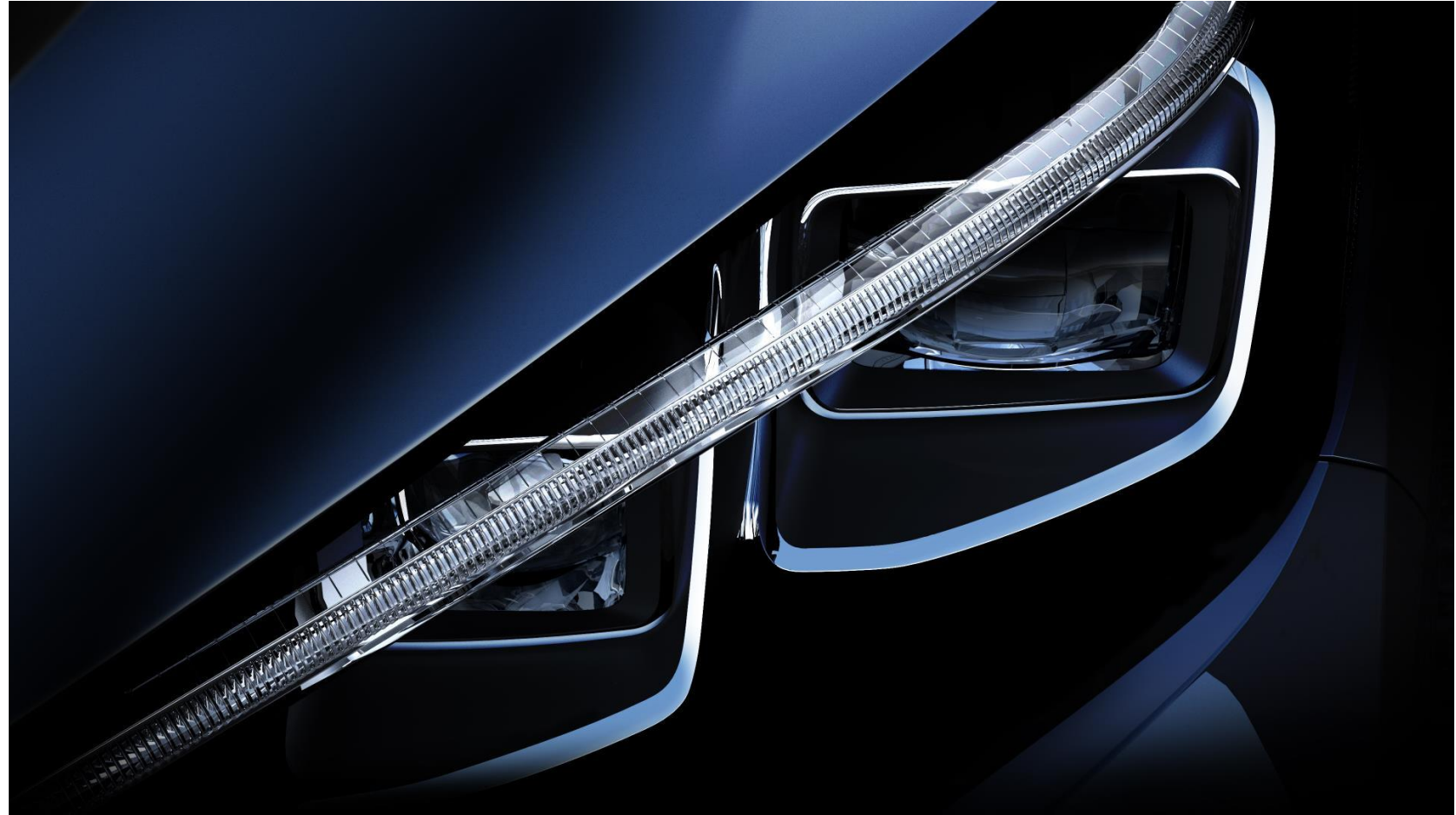
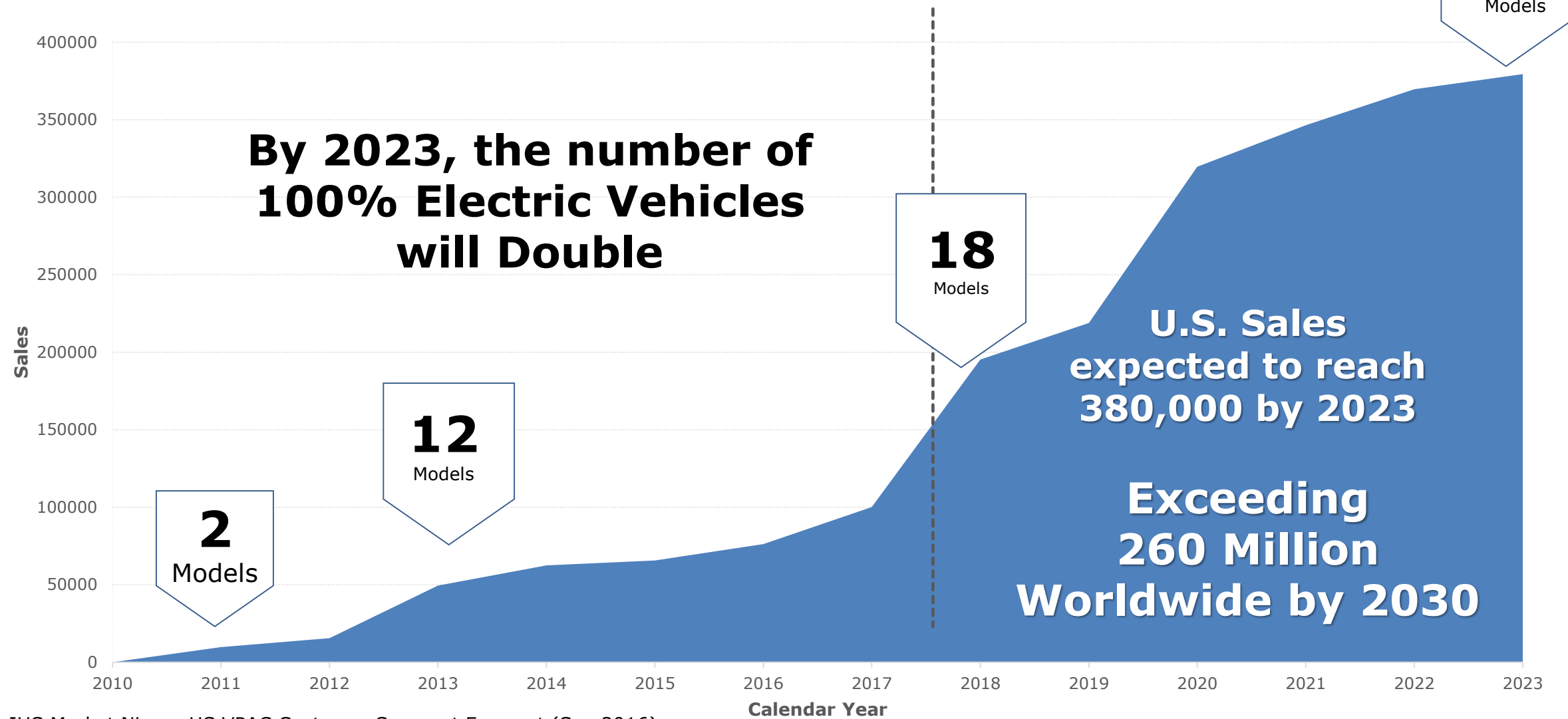


# The Practical Era of Electric Vehicles has Arrived!



with the “Simply Amazing” 2018 Nissan LEAF

# Electric Vehicle Sales are Projected to Skyrocket



Source: IHS Market Nissan US VPAC Customer Segment Forecast (Sep 2016)



# What Experts say about the Future

- ✓ **UBS**, Globally by 2031, fleet growth of EV's will be **Disruptive to Gasoline demand**.
- ✓ **PEW Research**, forecasts Worldwide **EV Industry** growth from **\$10 Billion** in 2012, to **\$250 Billion** by 2020. Its already reached **\$46.5 Billion**
- ✓ **University of Berkley**, predicts **EV's** will account for **64%** of U.S. vehicle sales by 2030. **PEW Research** says **60%** by 2025. Today, EV's account for less than **1%**.
- ✓ **OPEC**, projects worldwide EV sales of **266** million by, **2030**. A **500%** increase over their previous forecast. **Bloomberg Financial** says it will be nearly double that amount, at **500** million. EV's are about **3** million today.

# Where there's Need, There's Opportunity!



- ✓ Significantly Lower Operating Costs
- ✓ Zero Emissions, No Greenhouse Gas
- ✓ Reduced Maintenance & Repair
- ✓ Less Noise, Vibration, Harshness
- ✓ Spirited Performance & Handling
- ✓ Superior Reliability
- ✓ **Intelligent Mobility**, Driver Assist Technology

EV's are Automobiles, **EVOLVED**







**1891:**  
1<sup>st</sup> U.S.-built  
electric auto

**1900:**  
Electric the  
leading drive  
type in U.S.

**1901:**  
Oil discovered  
in Texas

**1908:**  
Model T  
introduced

**1912:**  
Self-starter  
introduced; hand  
crank eliminated

**1920s:**  
Gasoline  
established as  
dominant drive  
type in U.S.

**'30s-'60s:**  
EV quiet period

**1970s:**  
Gas crisis & air  
quality issues  
turn focus back  
to electric.  
Special-  
purpose EVs  
built.

**1990:**  
California 'ZEV'  
mandate issued

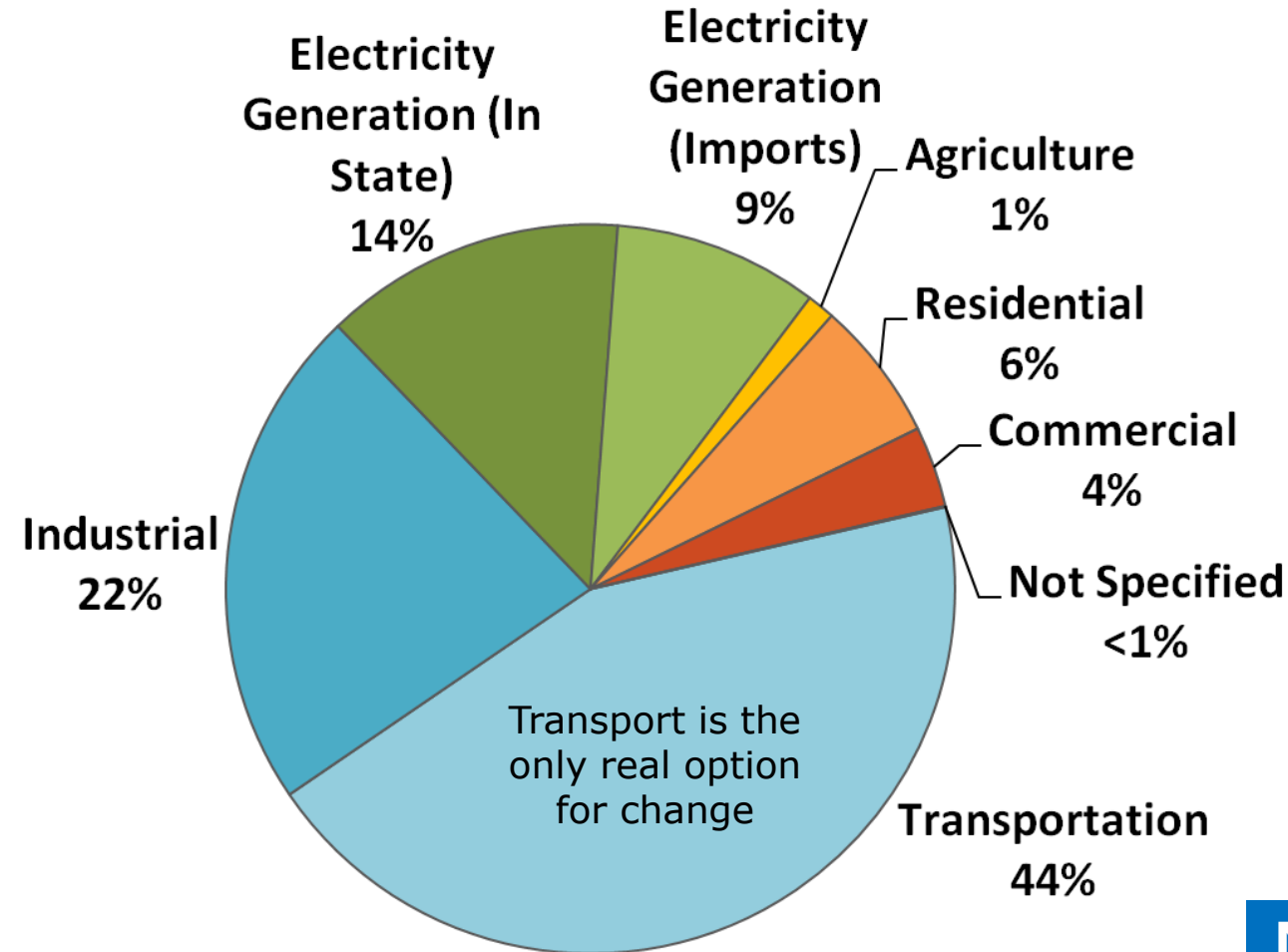
**1997:**  
Prius launched

**Early 2000s:**  
Low-volume EVs  
built by GM,  
Toyota, Nissan

**Late 2000s:**  
'Real world'  
EVs launched

**Today:**  
Consumer  
acceptance  
rapidly  
increasing

# New York Traffic is the Worst on the East Coast



2015 Total CO2 Emissions: 369.9 MMTCO2e

## HOURS WASTED A YEAR

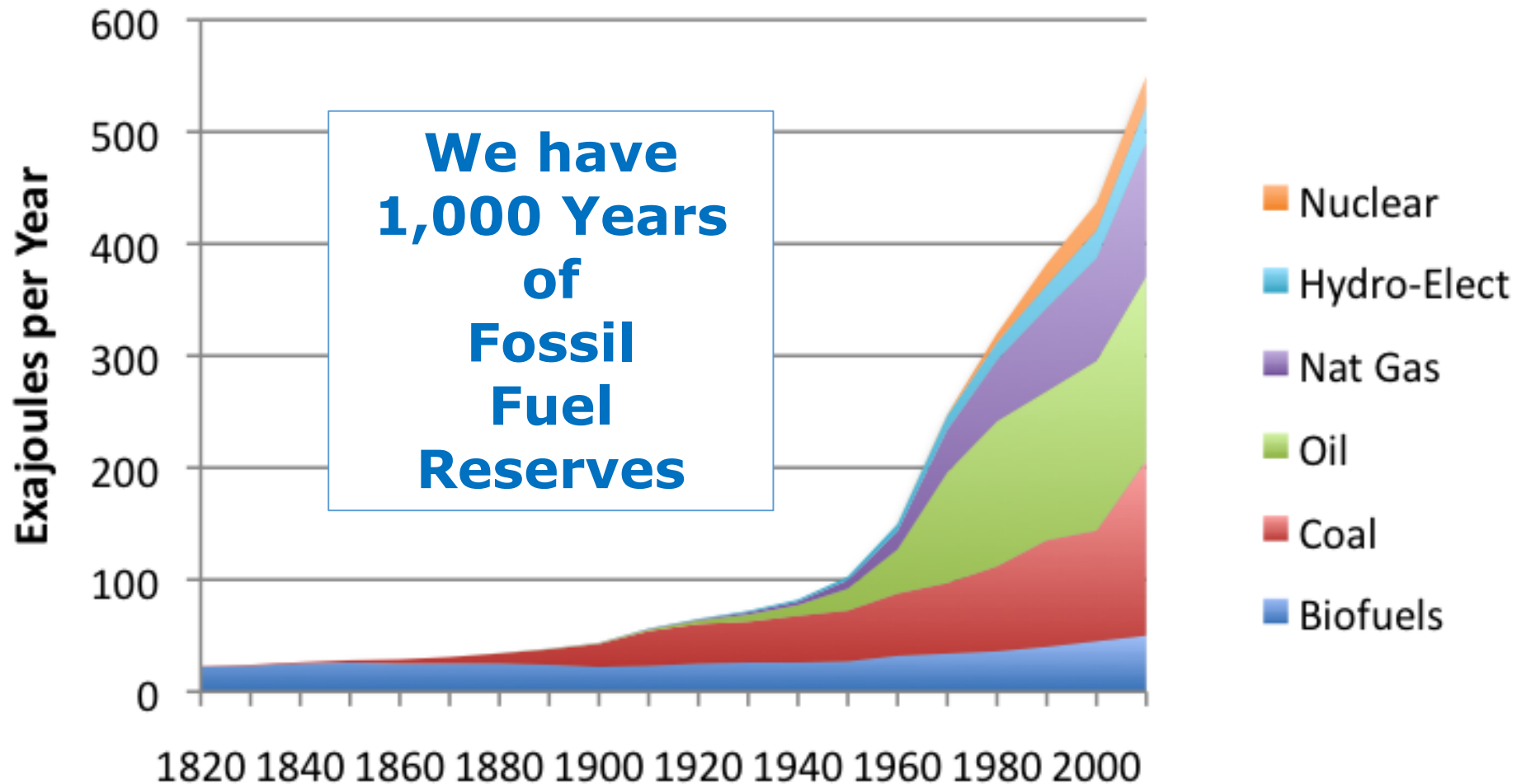
Top 10 worst cities where commuters waste hours stuck in traffic



Los Angeles	104.1
New York	89.4
San Francisco	82.6
Atlanta	70.8
Miami	64.8
Washington D.C.	61
Dallas	59.4
Boston	57.6
Chicago	56.6
Seattle	54.8

**New York Commuters spend 89.4 extra hours a year, commuting**

## World Energy Consumption

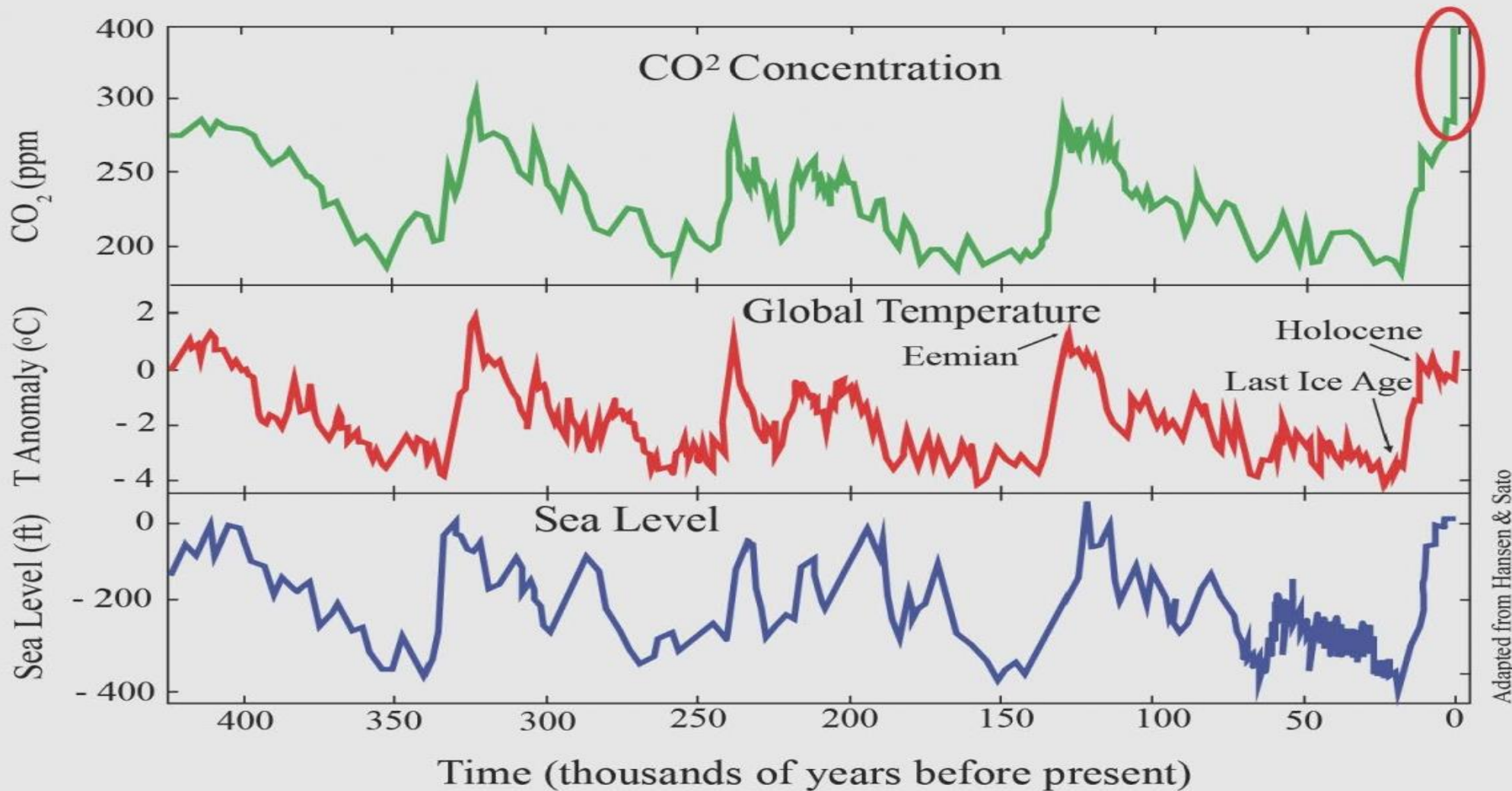


Earth's average temperature is the highest in **115,000** years!

**The number of 100 year weather events, is 29 over the last decade**

**We consume more oil today than all Energy types before 1960**





**Scientists  
are virtually  
unanimous**

**Global  
Temperature  
and  
Sea  
Level  
Mirrors  
CO<sub>2</sub>  
in the  
Atmosphere**

[www.johnenglander.net](http://www.johnenglander.net)

**China, India, France and the United Kingdom, have banned  
Gasoline powered auto sales, beyond 2040.**

Renault Nissan Internal





Replacing a single  
gasoline vehicle

with a Zero Emissions

**2018**

**Nissan LEAF**



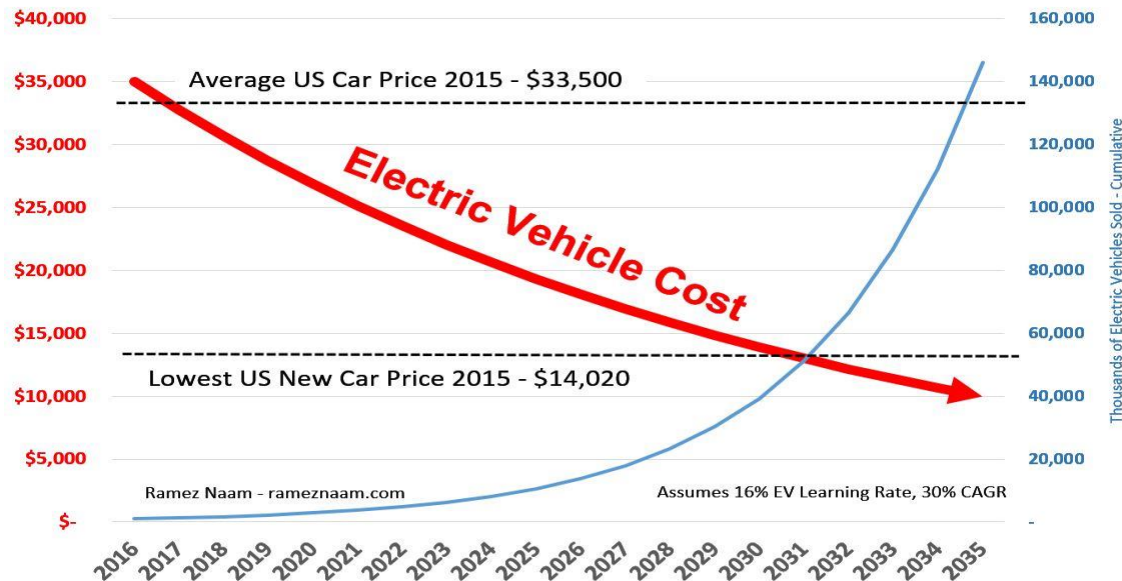
displaces **6 to 9 Tons** of  
CO<sup>2</sup> emissions annually



The Long Island Freeway  
allows Nissan LEAF drivers  
Single Occupant, HOV Lane access

**Equal to Planting 2,500 Trees**

## Cost of 200 mile range EV

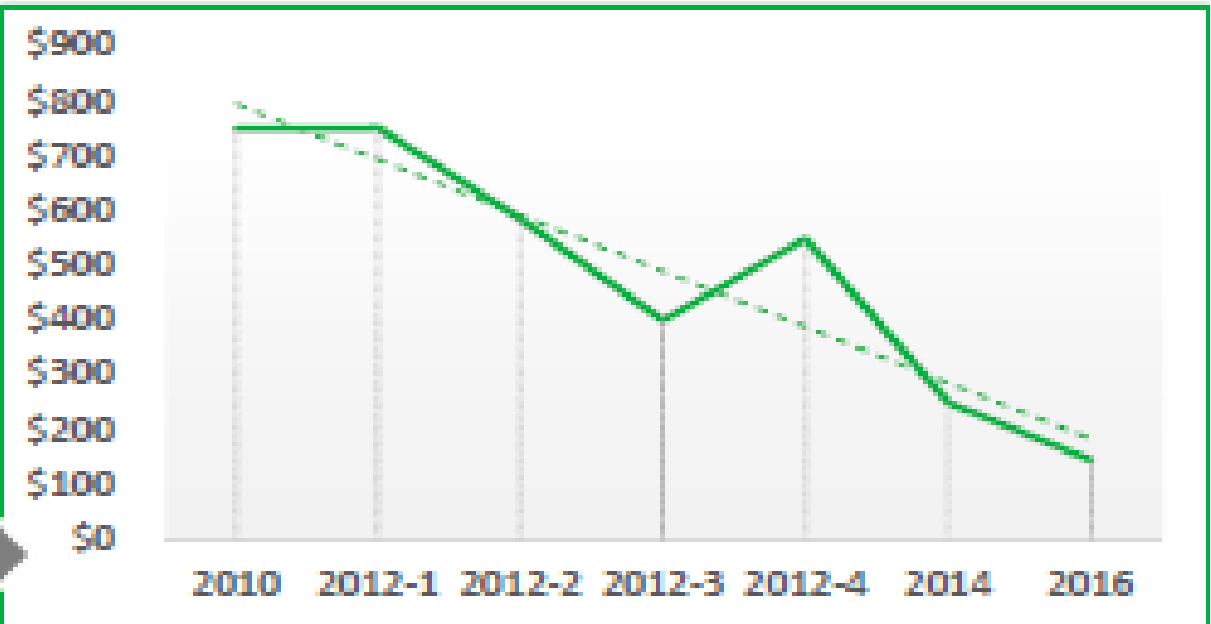


# Battery Costs have Declined 80% per kWh over the past 5 years

Allowing the 2018 Nissan LEAF to reduce **MSRP**, increase **Range** and add **Intelligent Mobility** innovations

## Battery Pricing

Battery Type	Year	Cost (\$/kWh)
Li-Ion	2016	\$145
Li-Ion	2014	\$200-300
Li-Ion	2012	\$500-600
Li-Ion	2012	\$400
Li-Ion	2012	\$520-650
Li-Ion	2012	\$752
Li-Ion	2010	\$750



# Nissan LEAF

## Safe and Reliable Battery Technology

NISSAN  INTELLIGENT MOBILITY



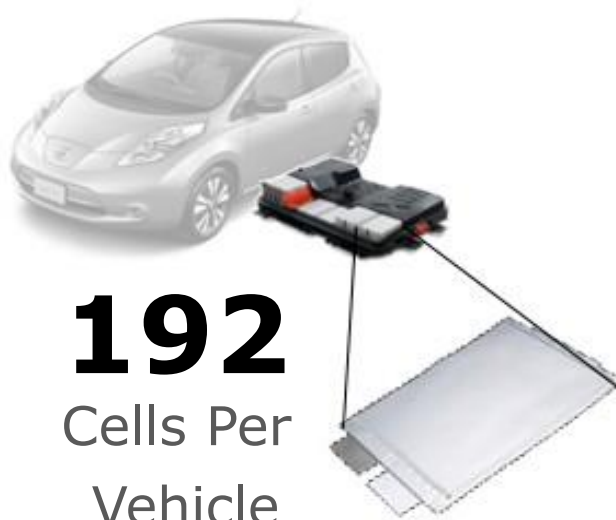
**325,000**

Vehicles

×

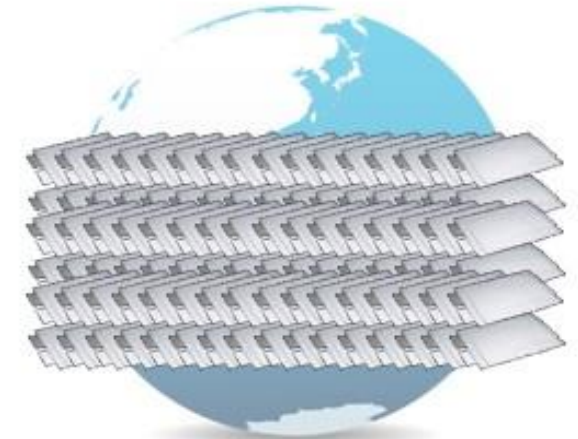
**192**

Cells Per  
Vehicle



=

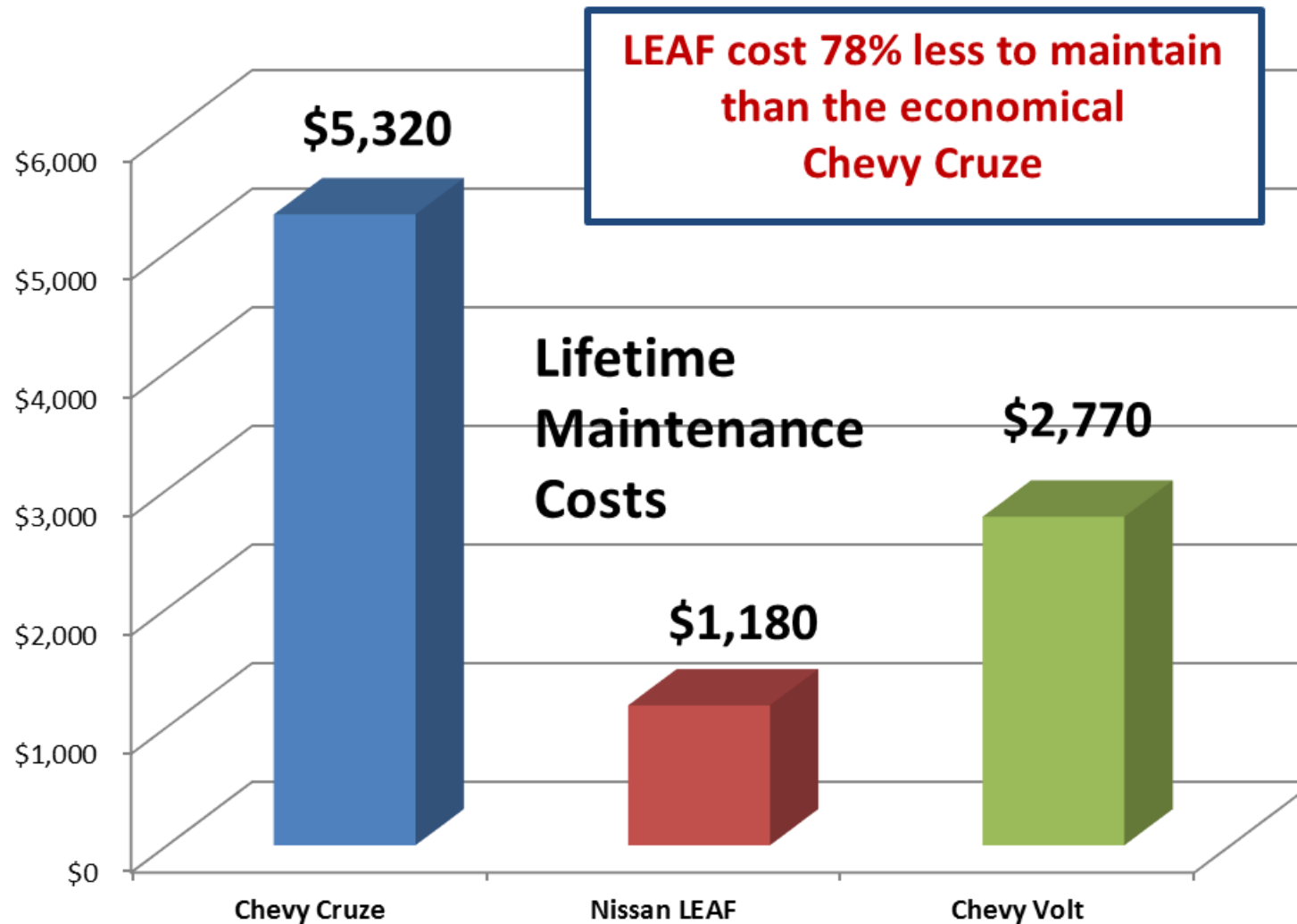
**62 million +**



**0**

**Serious Incidents**

# Do the Math! EV's cost less to Buy and Own



\*150,000 miles, Electric Power Research Institute

**Driving Electric's  
Equal to buying Gas for**

**60¢**

**a gallon, with Mid Grade  
Gas at \$3.10**

**about**

**80% less  
per mile**

**Before factoring the  
\$7,500 Federal EV Tax Credit  
with No Oil Changes, Ever!**



# There are Two Electric Vehicle Segments

NISSAN  INTELLIGENT MOBILITY

**Under**  
**200 miles**

**&**

**\$30,000**

**2018**



**MY18 Nissan LEAF**

MSRP **\$29.9k**  
Range **150 mi**  
Battery **40 kWh**  
Power **147 HP (110 kW)**

**Q3 2017**



**Volkswagen e-Golf**

MSRP **\$29k**  
Range **124 mi**  
Battery **36 kWh**  
Power **134 HP (100 kW)**

**ON SALE CA only  
(April '17)**



**Hyundai Ioniq Electric**

MSRP **\$29.5k**  
Range **124 mi**  
Battery **28 kWh**  
Power **118 HP (88 kW)**

**ON SALE**



**Ford Focus Electric**

MSRP **\$29k**  
Range **115 mi**  
Battery **33 kWh**  
Power **143 HP (107 kW)**

**Over**

**200 Miles**

**&**

**\$35,000**



**Chevrolet Bolt**

MSRP **\$36.6k**  
Range **238 mi**  
Battery **60 kWh**  
Power **200 HP (150 kW)**



**Tesla Model 3**

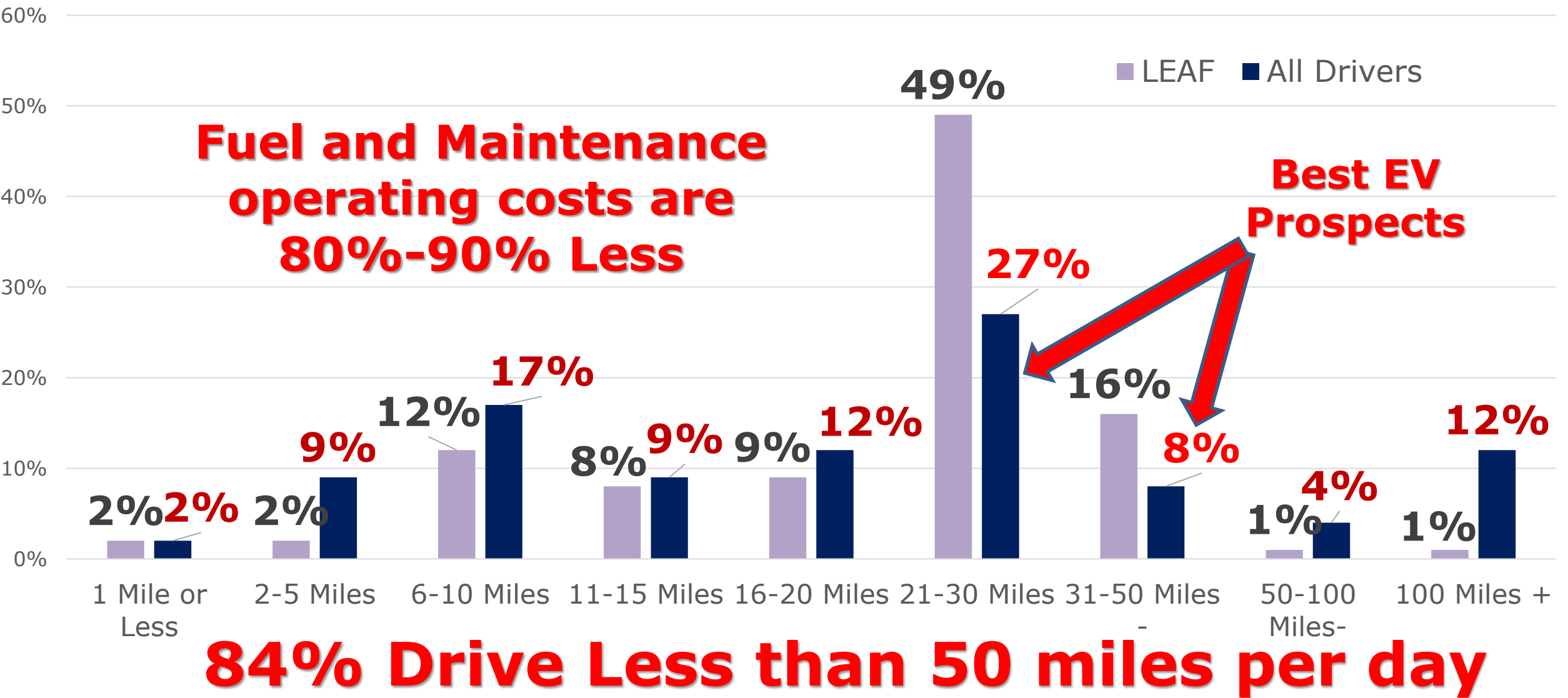
MSRP **\$35k**  
Range **220 mi**  
Battery **50 kWh**  
Power **258 HP**



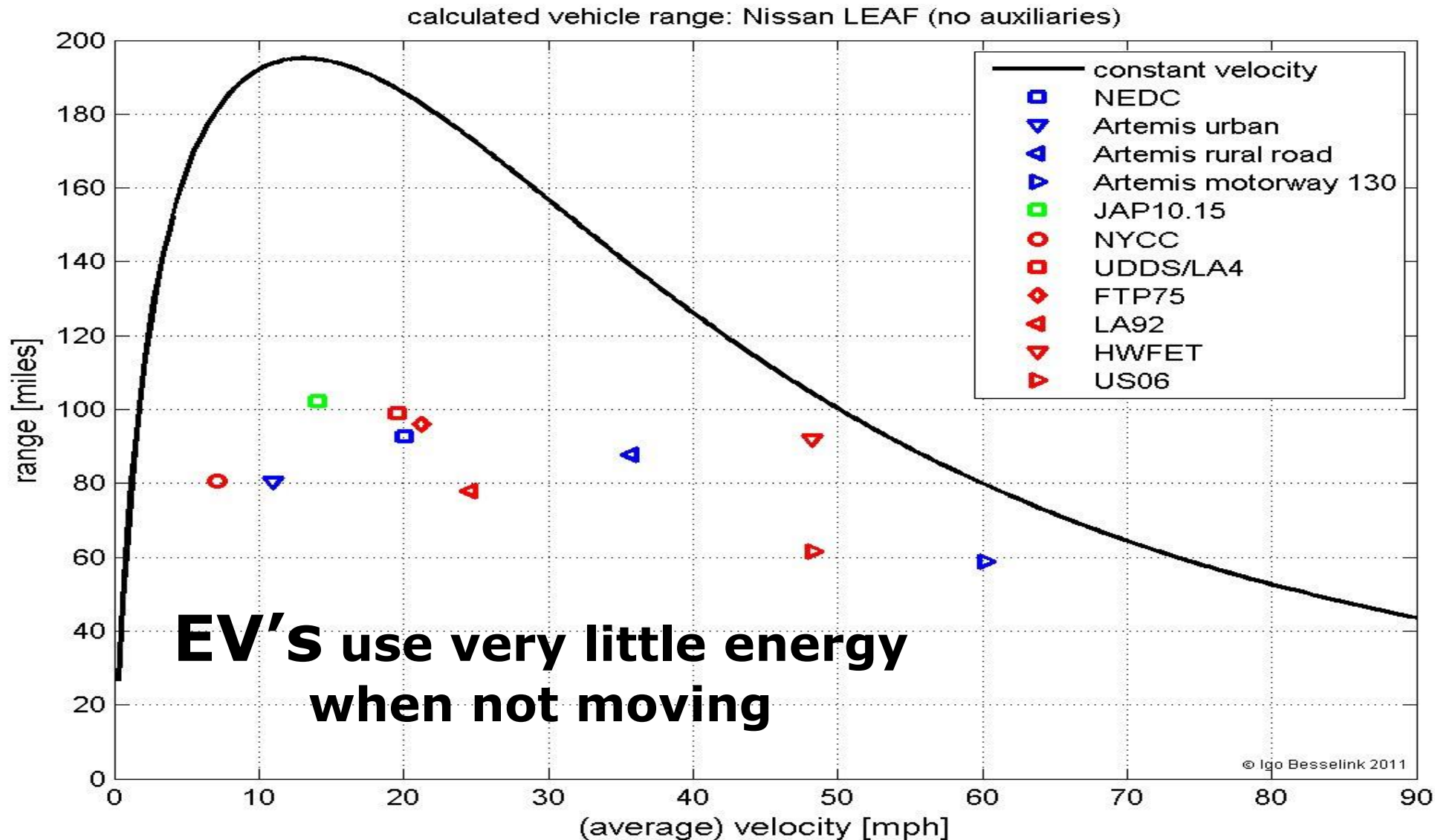
**2019 Nissan LEAF**

MSRP **TBD**  
Range **More Range (TBD)**  
Battery **TBD**  
Power **TBD**

# Nissan LEAF has all the Range Commuters Need!



# LEAF Loves Traffic and Doesn't Waste Fuel Idling



**Chart of  
2015 model  
with only  
84 miles of  
Range**

**for  
2018  
Nissan LEAF  
has 80%  
Greater  
Range**

## Innovation & Value Leadership



**"Best of Innovation Award"**

**2018 Consumer Electronics Show**

- Recognized as being the least expensive EV to own, over a 5-year period.
- The 2018 Nissan LEAF has also been named
- [World Car Of The Year](#).

- Nissan LEAF wins Consumer Electronic Show **"Best of Innovation"** award for Vehicle Intelligence and Driver Assist Technology
- Award recognizes products and technologies that benefit people and the planet.
- Named CES honoree "Tech for a Better World"

**"Lowest 5-Year Cost of Ownership"**

**2018 Award Recipient, Kelley Blue Book KBB.com**





# 2018 Nissan LEAF SV

2017 MODEL  
**\$34,300**

**\$1,710**

-5.0%

2018 MODEL  
**\$32,490**

+

**\$5,000**  
**IN ADDED**  
**VALUE**

VS. 2017 SV MODEL

## Includes all the S Features, plus:

- Navigation System, with Nissan Connect EV
- 7-inch Color Display, 6-speaker audio system
- 17 inch Aluminum-alloy Wheels, Fog Lamps
- Apple Car Play, Android Auto, HD Radio
- Intelligent Cruise Control
- DC Fast Charge Port



# 2018 Nissan LEAF S

2017 MODEL  
**\$30,680**

**\$690**

-2.2%

2018 MODEL  
**\$29,990**

**\$4,500**  
**IN ADDED  
VALUE**  
VS. 2017 S MODEL



## S Features:

- Contemporary exterior styling
- Larger Battery (40kWh vs. 30kWh)
- Driving Range increased 40%
- Faster charging with 6.6 kWh charger
- More Powerful Motor (110 kW vs. 80 kW)
- Horsepower increased 37%
- Automatic Emergency Braking, Standard
- e-Pedal with slope stop/hold
- 7" Monitor, with Analog Speedometer
- LED headlights, with Auto on/off





# 2018 Nissan LEAF SL

2017 MODEL  
**\$36,790**

**\$590**

-1.6%

2018 MODEL  
**\$36,200**

**\$6,783**  
**+ IN ADDED  
VALUE**

VS. 2017 SL MODEL

## Includes all SV Features, plus:

- 8-way power driver's seat w/ power lumbar support
- Leather seat trim, Heated Front Seats
- Bose® 7 speakers Premium audio system
- Rear Cross Traffic Alert & Blind Spot Warning
- Portable charge cord, for 120V/240V Outlets
- Intelligent Around View® Monitor

# 2018 Nissan LEAF is the Best Value among affordable EV's



Price Positioning Comparison Chart

	2018 Nissan LEAF	2017 Chevrolet Bolt	2018 Ford Focus Electric	2017 Hyundai Ioniq Electric	2017 Volkswagen e-Golf
Starting MSRP	\$29,990	\$36,620	\$29,120	\$29,500	\$29,000
Driving Range (Battery Capacity)	150 miles (40 kWh)	238 miles (60 kWh)	115 miles (33 kWh)	124 miles (28 kWh)	125 miles (36 kWh)
Electric Motor Output	110 kW (147 hp)	150 kW (200 hp)	107 kW (143 hp)	88 kW (118 hp)	100 kW (134 hp)
Key Standard Features	<ul style="list-style-type: none"> <li>• Auto on/off headlights</li> <li>• Hands-free phone and audio streaming via Bluetooth*</li> <li>• e-Pedal with auto brake hold on all slopes</li> <li>• Automatic Emergency Braking</li> <li>• Easy-Fill Tire Alert</li> </ul>	<ul style="list-style-type: none"> <li>• Auto on/off headlights</li> <li>• Hands-free phone and audio streaming via Bluetooth*</li> <li>• One pedal driving</li> <li>• Low speed automatic emergency braking</li> </ul>	<ul style="list-style-type: none"> <li>• Auto on/off headlights</li> <li>• Hands-free phone and audio streaming via Bluetooth*</li> <li>• Hill Start Assist</li> </ul>	<ul style="list-style-type: none"> <li>• Auto on/off headlights</li> <li>• Hands-free phone and audio streaming via Bluetooth*</li> </ul>	<ul style="list-style-type: none"> <li>• Auto on/off headlights</li> <li>• Hands-free phone and audio streaming via Bluetooth*</li> <li>• Three regenerative braking modes</li> </ul>