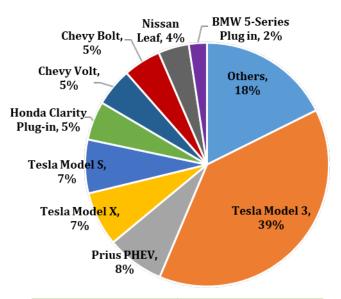
## 2018 National Sales of Leading BEVs and PHEVs

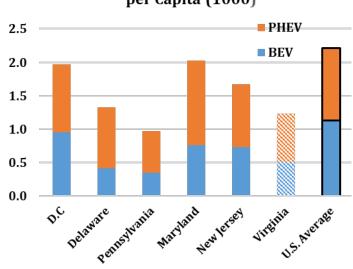


Avg. Price for Gallon of Gasoline in VA: \$2.15

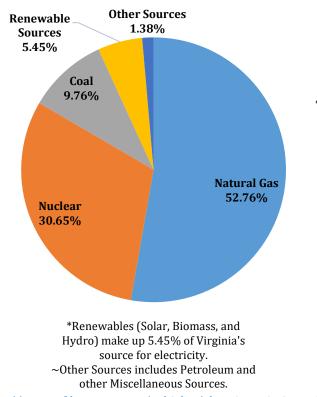
Avg. Price of **Electric Equivalent** Gallon in VA:

\$1.06

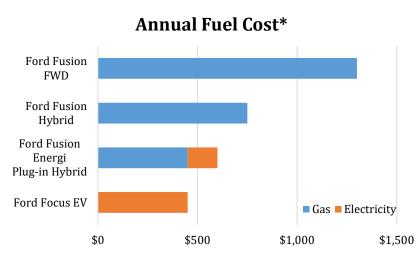
### 2017 Mid-Atlantic PEV Registrations per Capita (1000)



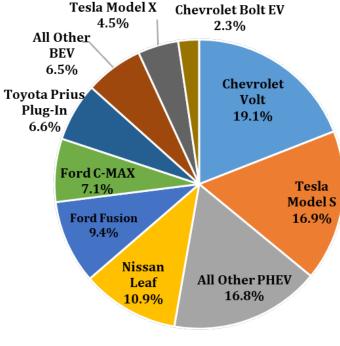
#### 2019 VA ELECTRICITY GENERATION SOURCE Virginia Leading PEV 2017 Registrations



https://www.afdc.energy.gov/vehicles/electric emissions.php



\*based on 15.000 miles/year, VA averages of gasoline price of \$2.15/gallon and \$0.0918/kWh of electricity



Check model availability on AFDC. Note availability varies by state. https://www.afdc.energy.gov/states/

# VA Share of Total U.S. PEVs

1.38%

#### Reference:

Gasoline and Electricity Price, EIA Number of chargers by type, AFDC Vehicle fuel efficiency, Fueleconomy.gov Registration, IHS Polk Data PEV Sales, Hybridcars.com



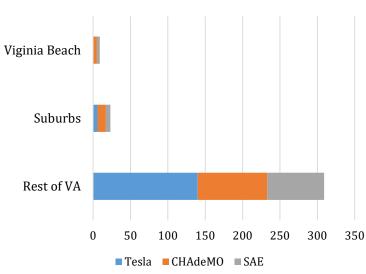
# Virginia Electric Vehicles Fact Sheet

#### **Charging Your Electric Vehicle:**

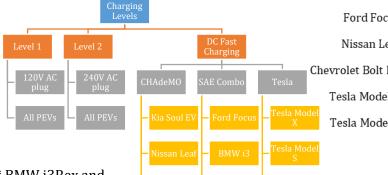
There are three different levels of charging:

- AC Level 1: This provides 120 volts of charging, typically found in a home outlet. Overnight charging can replenish an entire PHEV battery, but not all BEV batteries.
- AC Level 2: This level provides 240 volts, about 10-20 miles of range per hour of charging. This can be installed for home charging, but is also used for public charging. In the home, it can replenish an entire BEV battery overnight.
- DC Fast Charging: This is for rapid charging along heavy traffic corridors. In 20 minutes it can provide enough battery life for a 50-70 miles of range. In ideal conditions of mild temperatures and a low initial charge, a fast charge to 80% will take about 30 minutes for a BEV, but longer in cold weather. There are three types of DC fast charging systems. depending on the vehicle: SAE J1772 combo, CHAdeMO, and Tesla. Adapter is available for Tesla Model S and Model X to use the CHAdeMO chargers.

# DC Fast Charging Outlets in VA



# **Charging Levels and Types**

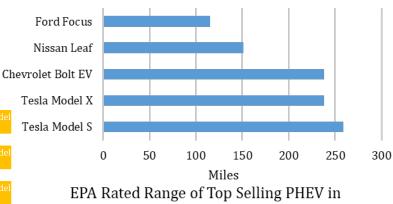


\* BMW i3Rex and **Outlander PHEV** are the only two PHEVs to be able fast charged

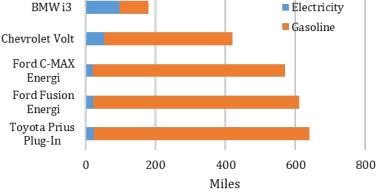
#### Did You Know?

A full charge can give PHEVs up to 100 miles of electric range and BEVs up to 300 miles of range, depending on the model. These distances can change depending on factors like weather, driving conditions, and driving habits. See on the right how varying your speed, driving behavior, and temperature affect battery range.

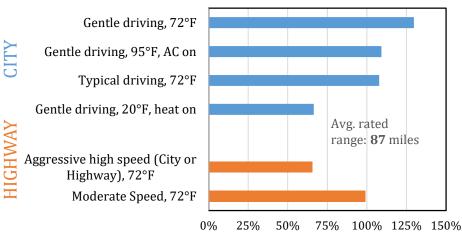
### EPA Rated Range of Top Selling BEV in Virginia (2018)



Virginia (2018)



# Range Depletion Dependent on Driving and Weather Conditions



\*based on averages of 3 2015 BEVs tested by ANL and rated on fueleconomy.gov (Mercedes-Benz-B-Class EV, Kia Soul EV, Chevrolet Spark EV)

Percentage of rated electric range