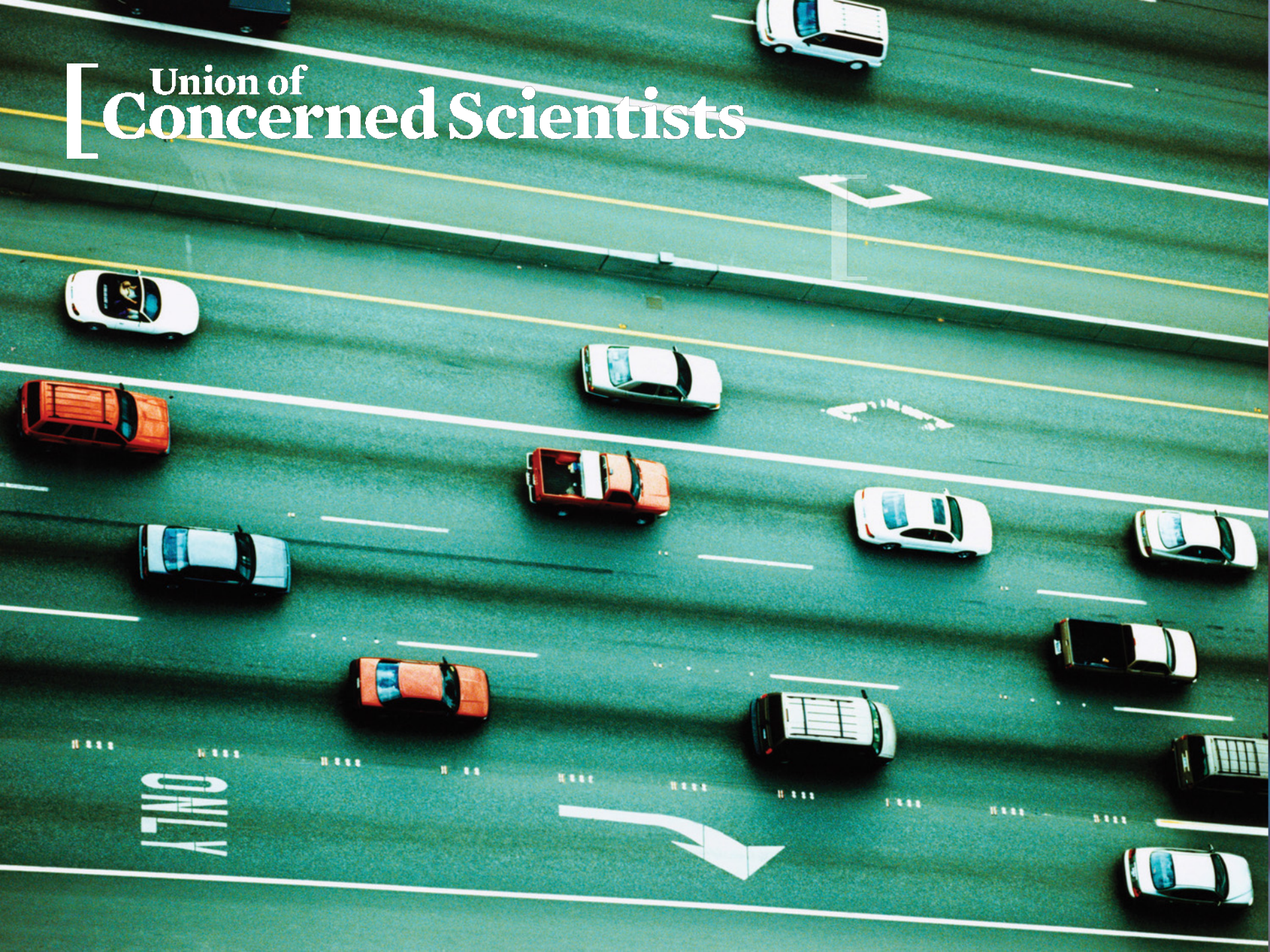


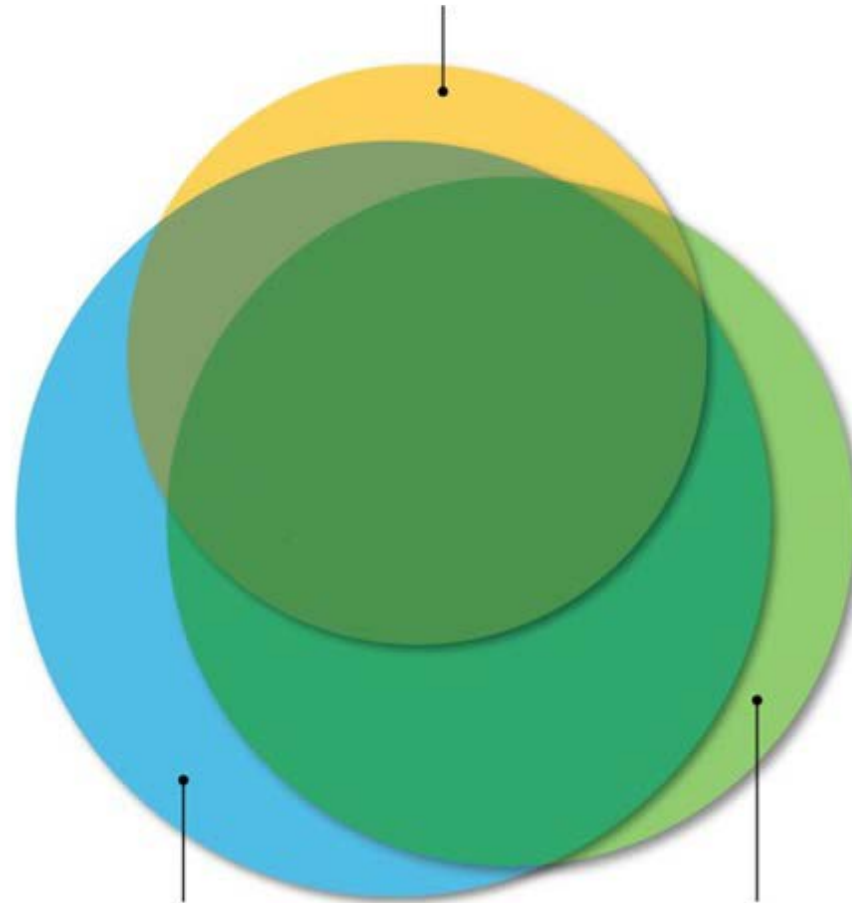
Union of Concerned Scientists



1. Are EVs ready for mass adoption?
2. How much can EVs save drivers on fuel and maintenance?
3. How clean are EVs in the Greater WDC area?

Today's EVs require:

Parking and a plug



4 or fewer passengers

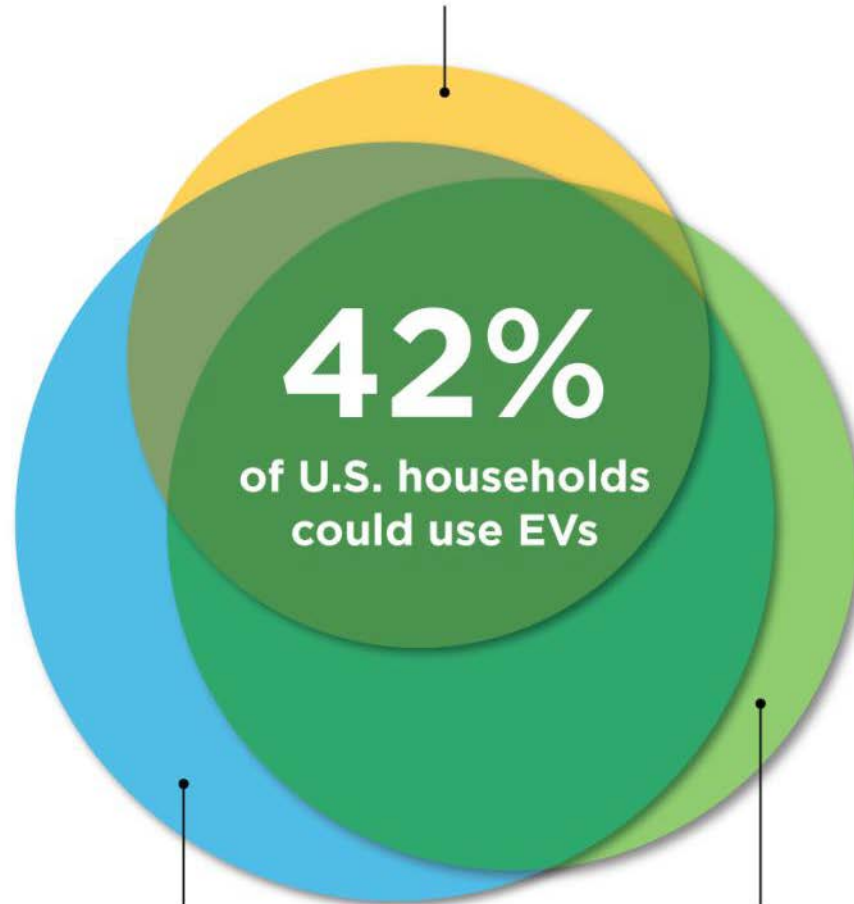
No hauling needs

The requirements above apply to both plug-in hybrid EVs and battery-electric vehicles.

Today's EVs require:

Parking and a plug

56% of U.S. households have access to charging.



4 or fewer passengers

95% of U.S. drivers have 4 or fewer passengers.

No hauling needs

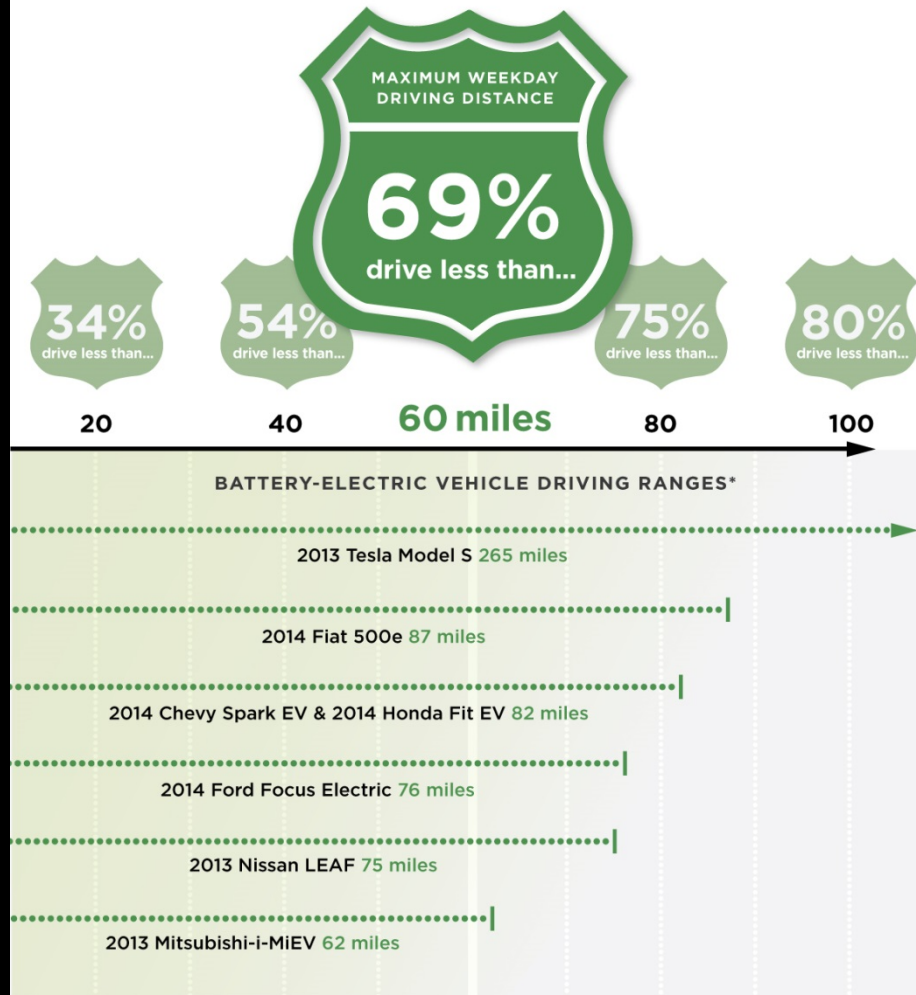
79% of U.S. drivers don't require hauling.

The requirements above apply to both plug-in hybrid EVs and battery-electric vehicles.

45 million American households could use one of today's EVs.

But what about range?

69% of U.S. drivers drive less than 60 miles on weekdays—well within the range of many battery-electric vehicles.



*Plug-in hybrid EVs, which use gasoline and electricity, can travel as far as conventional vehicles. Battery-electric vehicles, powered solely by electricity, have driving ranges determined by their battery size.

1. Are EVs ready for mass adoption?
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eGallon: Compare the costs of **driving** with **electricity**

What is eGallon?

It is the cost of fueling a vehicle with electricity compared to a similar vehicle that runs on gasoline.

Did you know?

On average, it costs about half as much to drive an electric vehicle.

Data and Methodology
Updated: March 30, 2019

Find out how much it costs to fuel an electric vehicle in your state

Maryland

regular gasoline

2.68

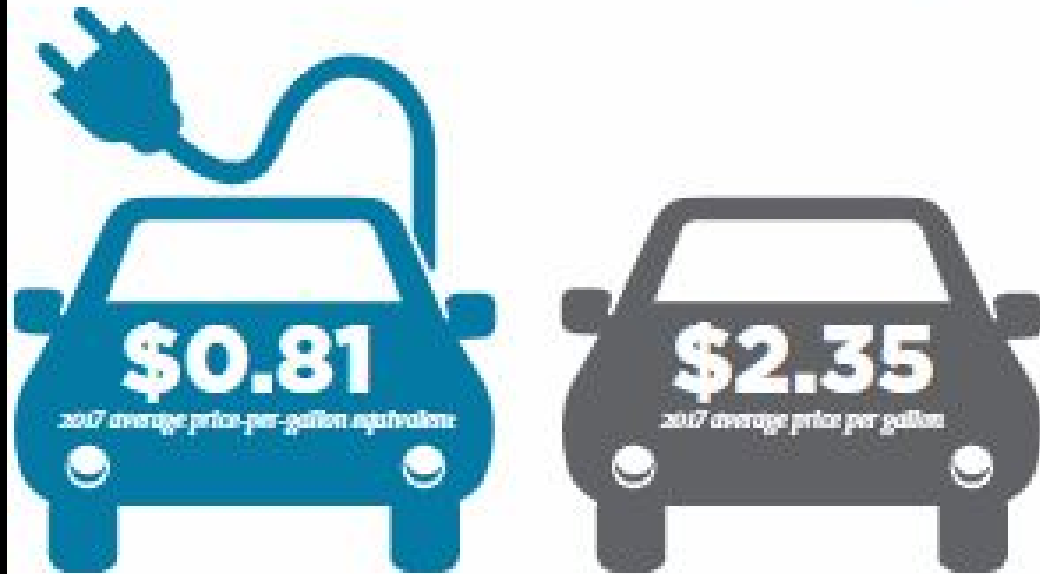
electric eGallon

1.19

Rural EV drivers save the most on fuel.

On average, rural Maryland drivers could save \$439 by switching from gasoline to electricity.

City drivers save money too.



Charging an EV at home in Baltimore is like paying \$0.81 per gallon of gasoline.

\$4.50
\$4.00
\$3.50
\$3.00
\$2.50
\$2.00
\$1.50
\$1.00
\$0.50
\$0.00

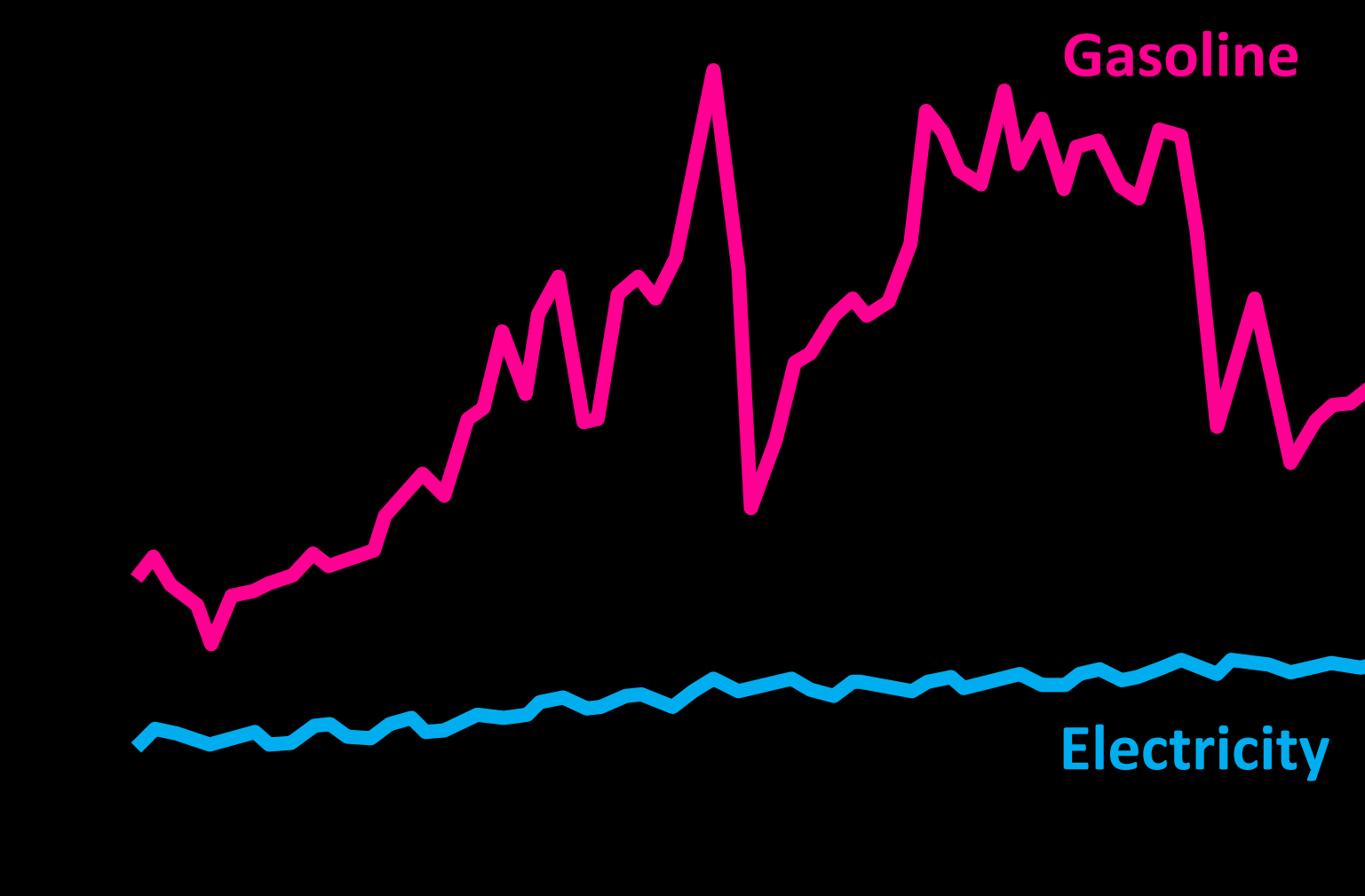
2005

2010

2015

Gasoline

Electricity



Manufacturer's recommended services are **\$1,500 more expensive** for a Chevrolet Sonic compared to the all-electric Chevy Bolt, over 150,000 miles.

1. Are EVs ready for mass adoption?
2. How much can EVs save drivers on fuel and maintenance?
3. How clean are EVs in the Greater WDC area?

Maryland Net Electricity Generation



Coal

17%



Natural Gas

30%



Nuclear

40%

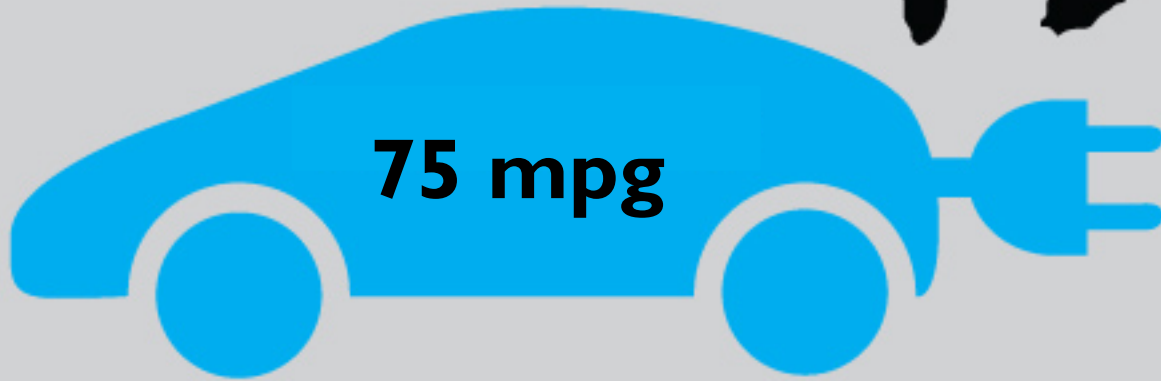


Renewables

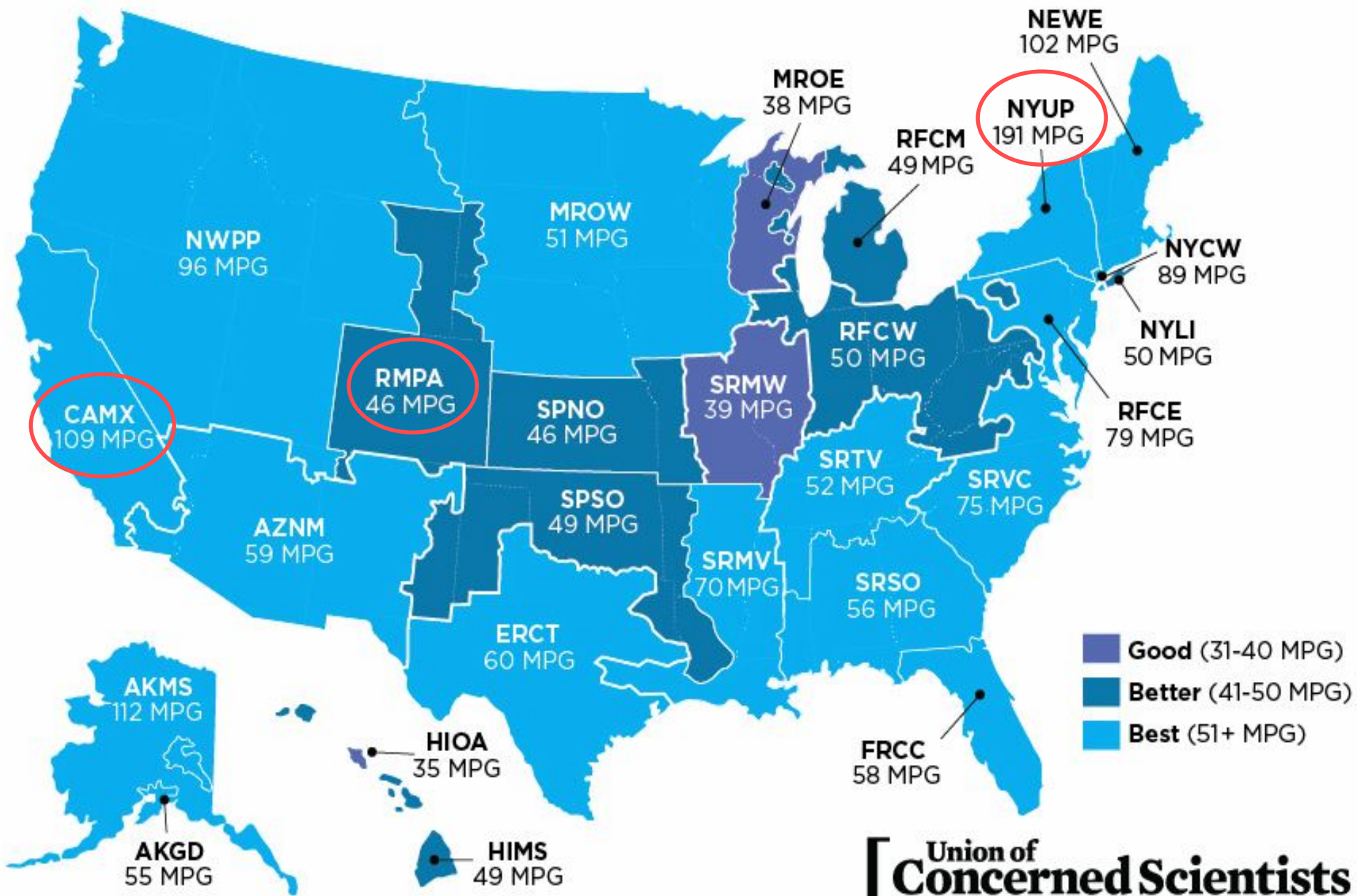
13%

Dec. 2018

An EV in Maryland produces the equivalent emissions of a gasoline vehicle that gets...

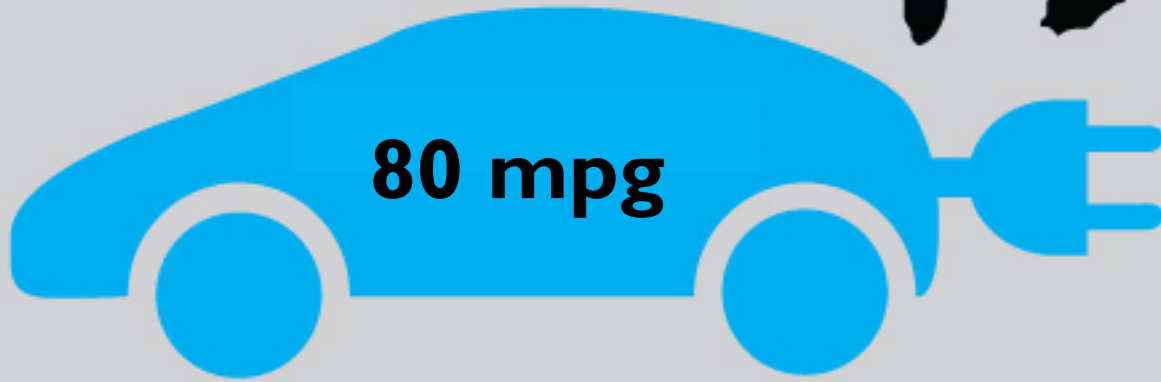


75 mpg

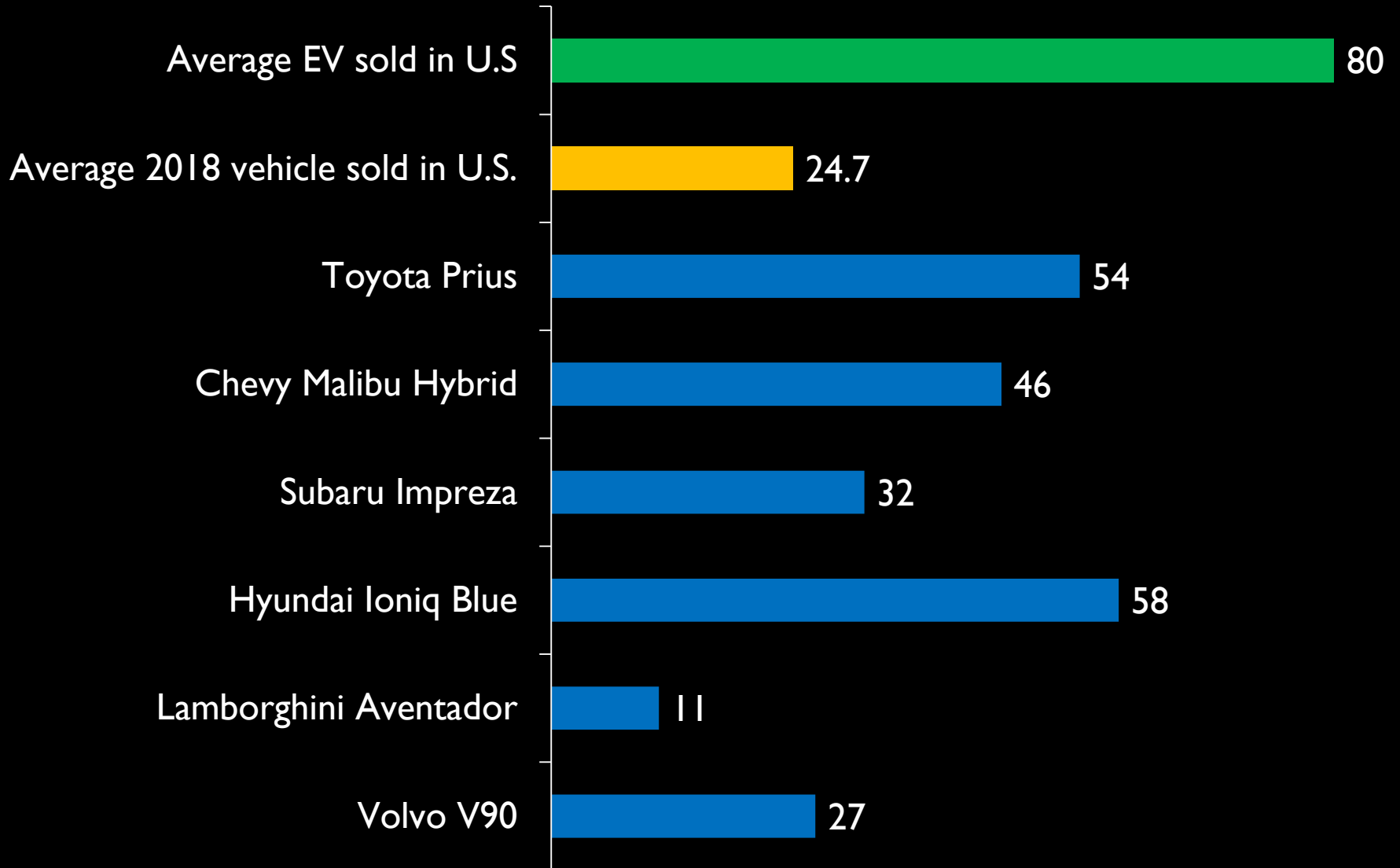


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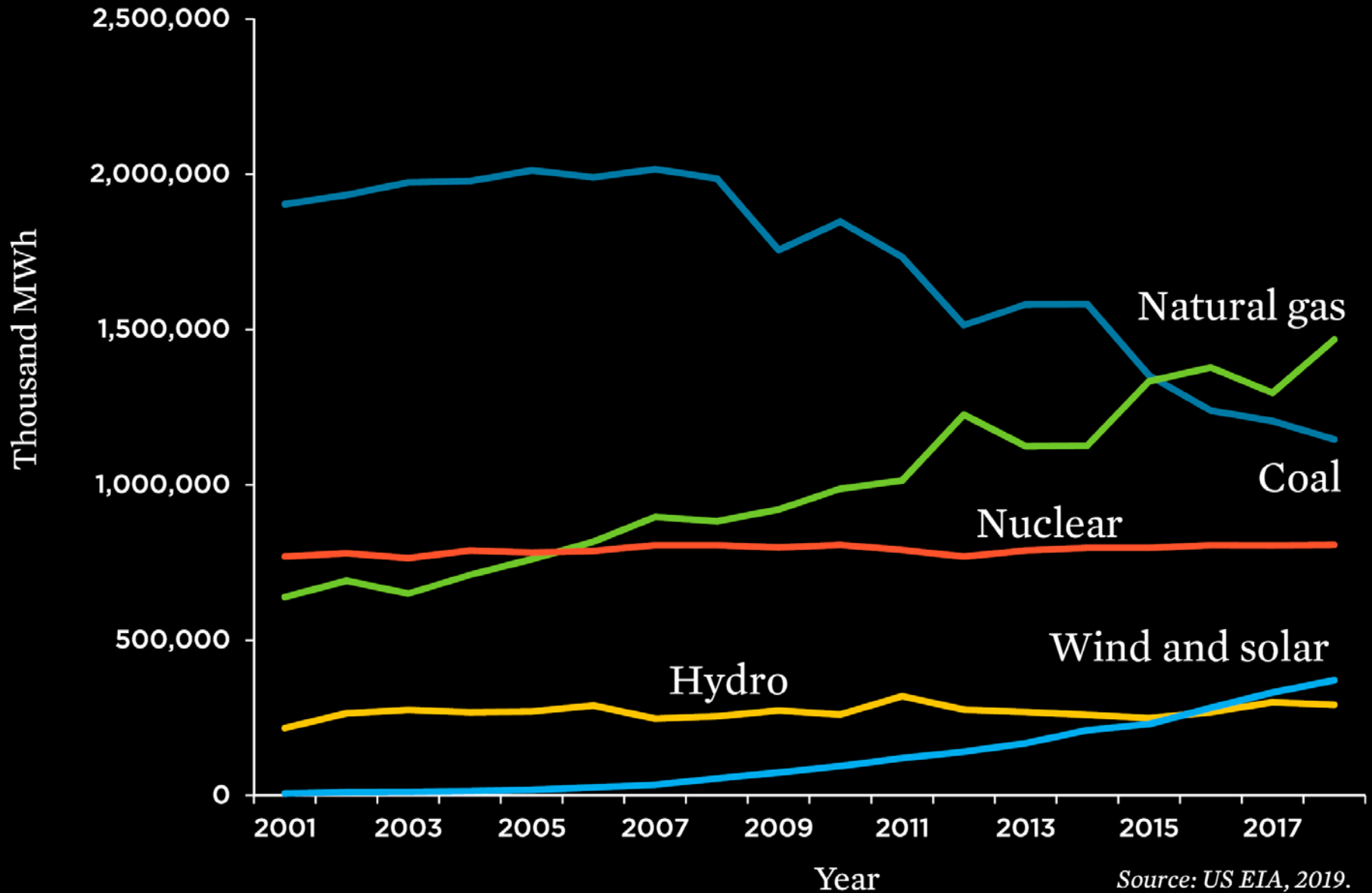
Average EV sold in the U.S. produces the equivalent emissions of a gasoline vehicle that gets...



Average Combined MPG

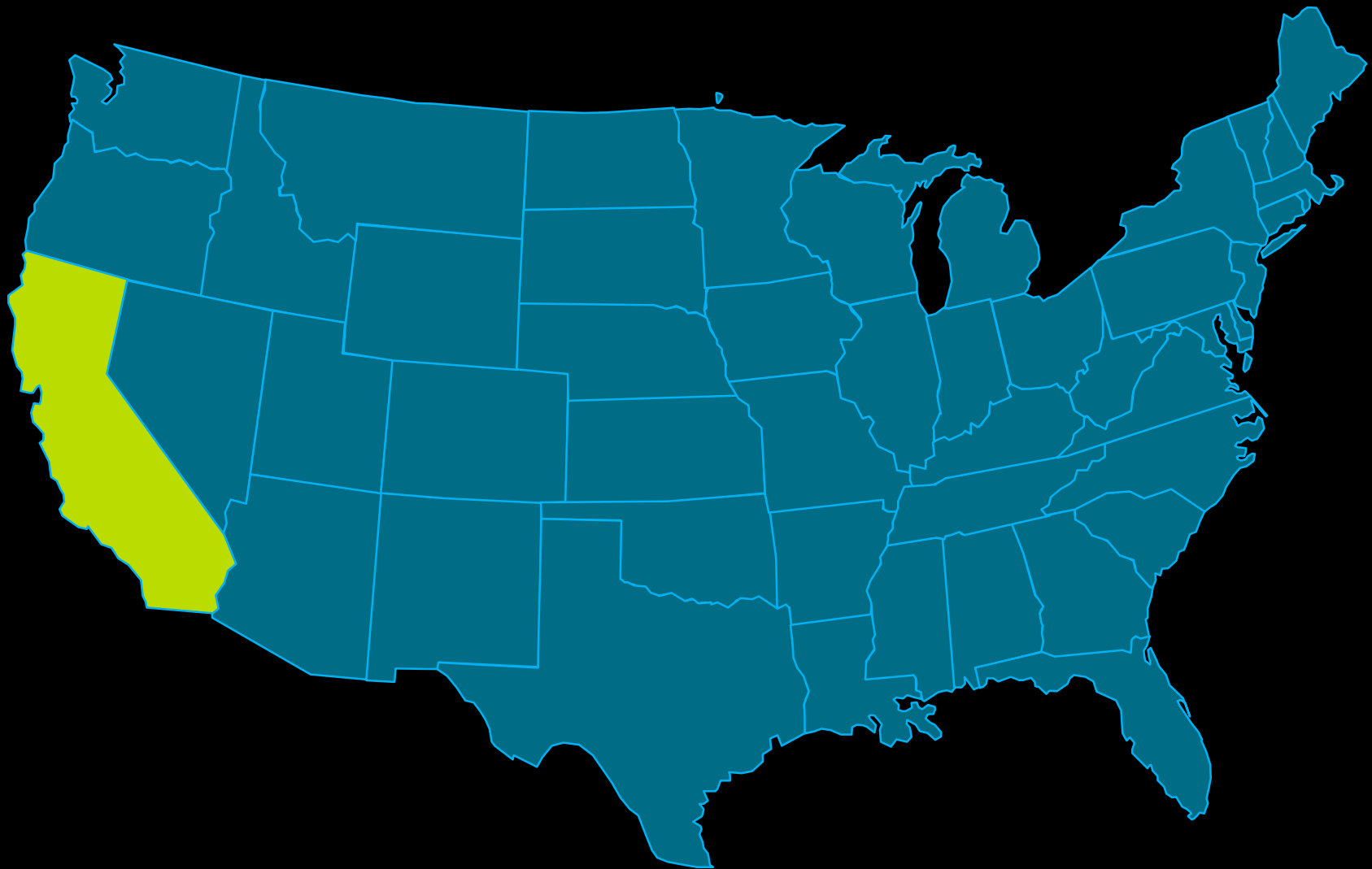


Net Electricity Generation All Sectors, United States

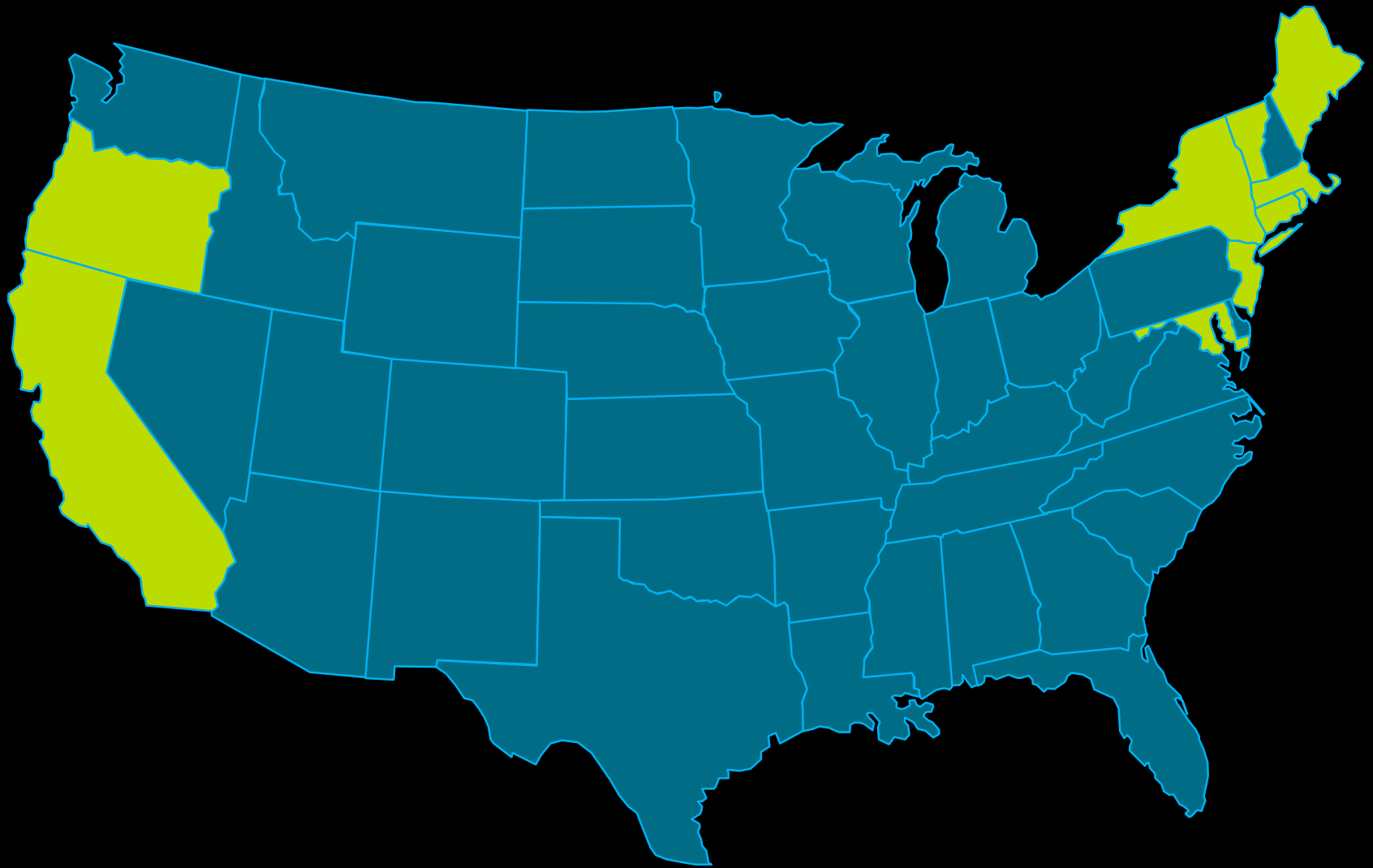


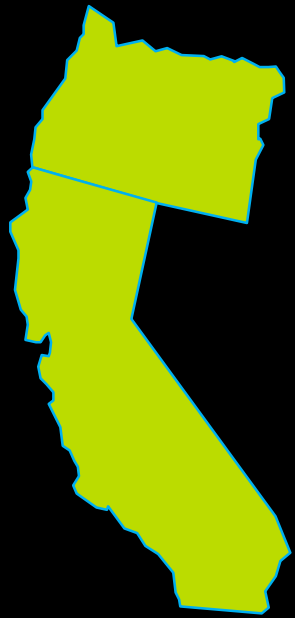
Source: US EIA, 2019.

California Zero Emissions Vehicle (ZEV) Program



California Zero Emissions Vehicle (ZEV) Program





28% of U.S vehicle sales in 2015.

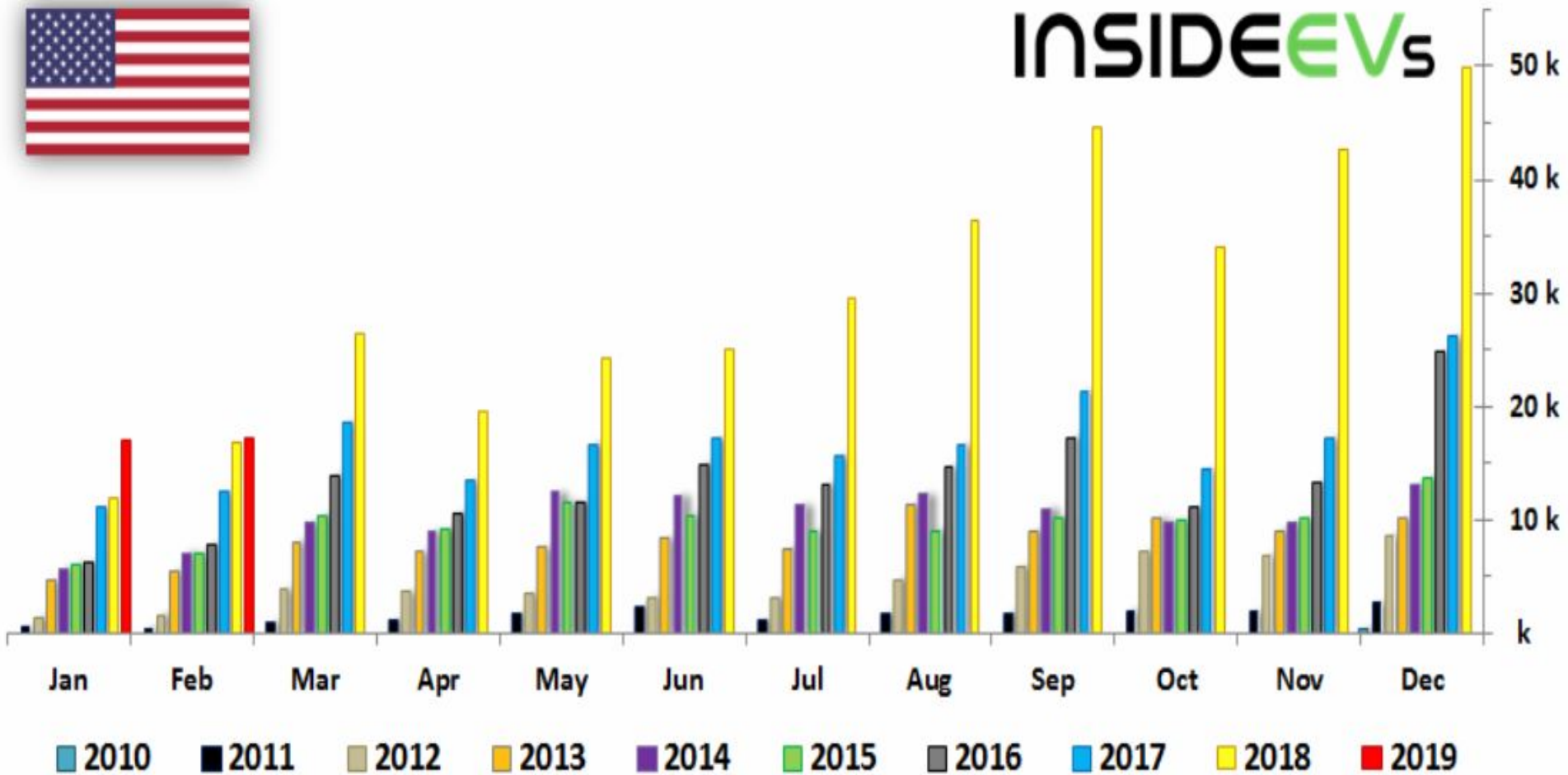


8% required to be EVs in 2025.

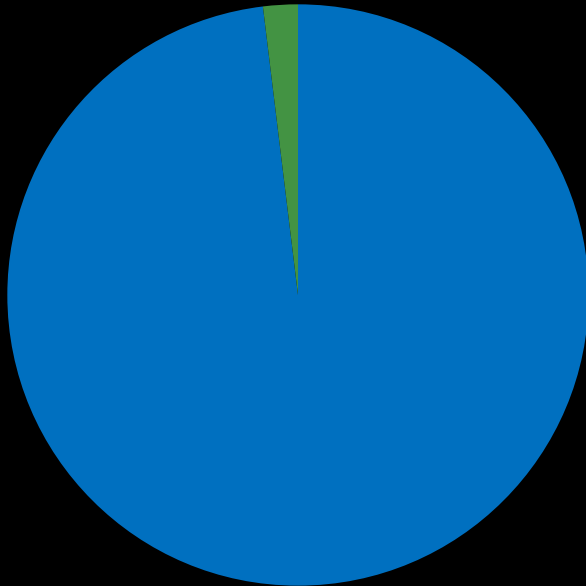
U.S. Plug-In Car Sales



INSIDEEVs

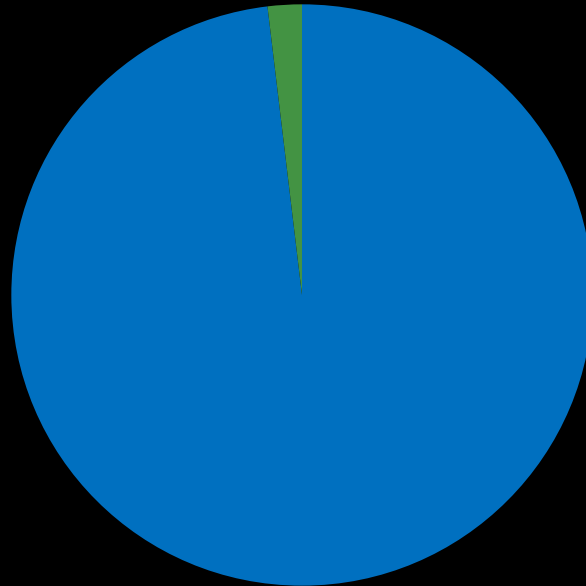


2018 U.S EV sales



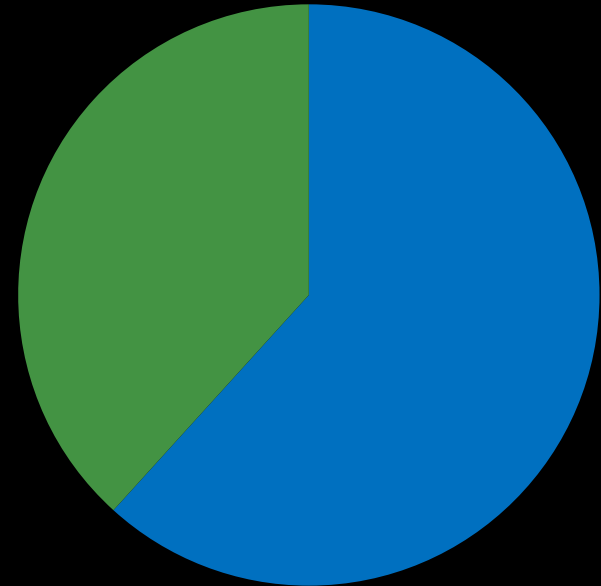
2%

2018 Maryland EV sales



2%

Potential EV market

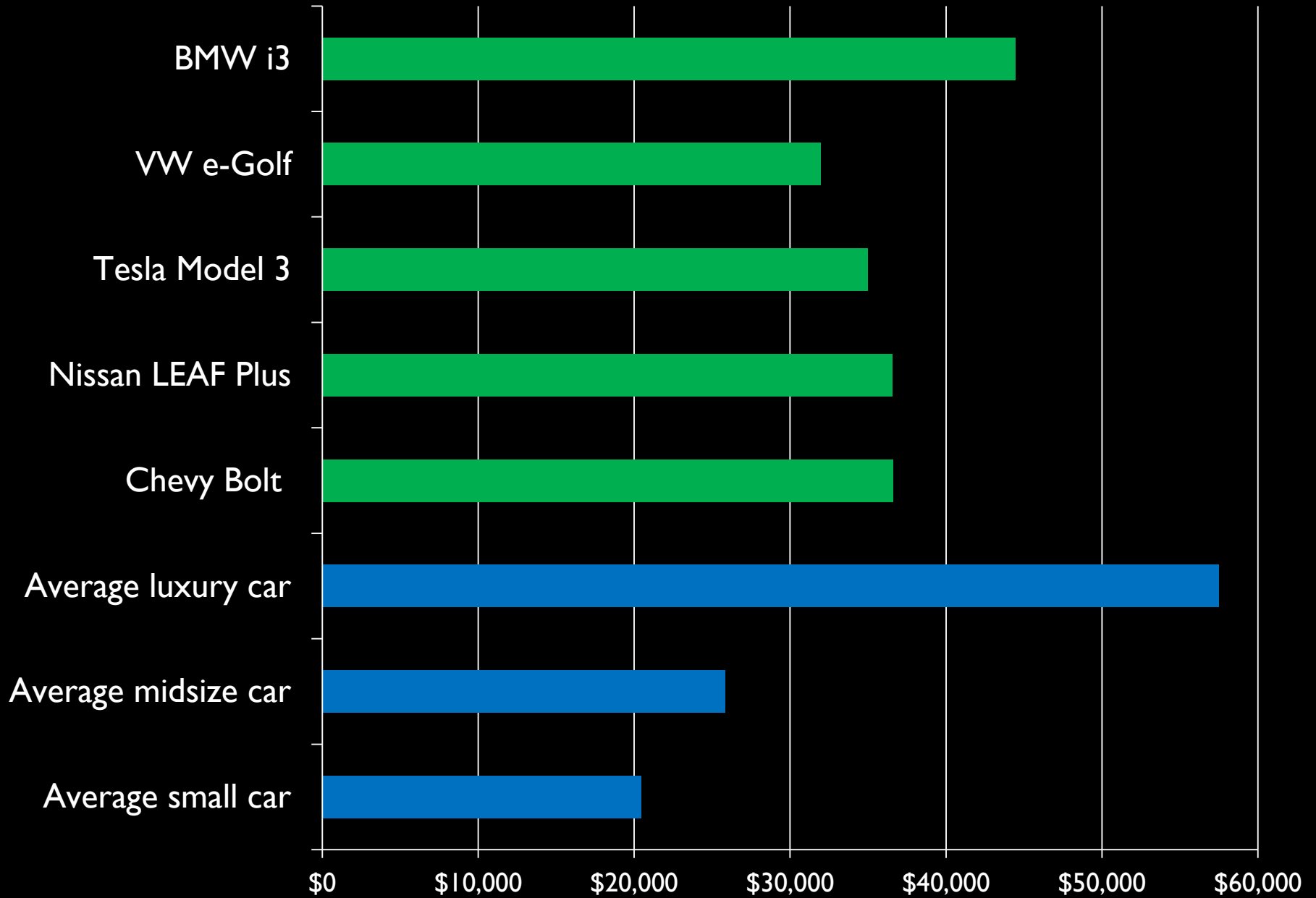


> 40%

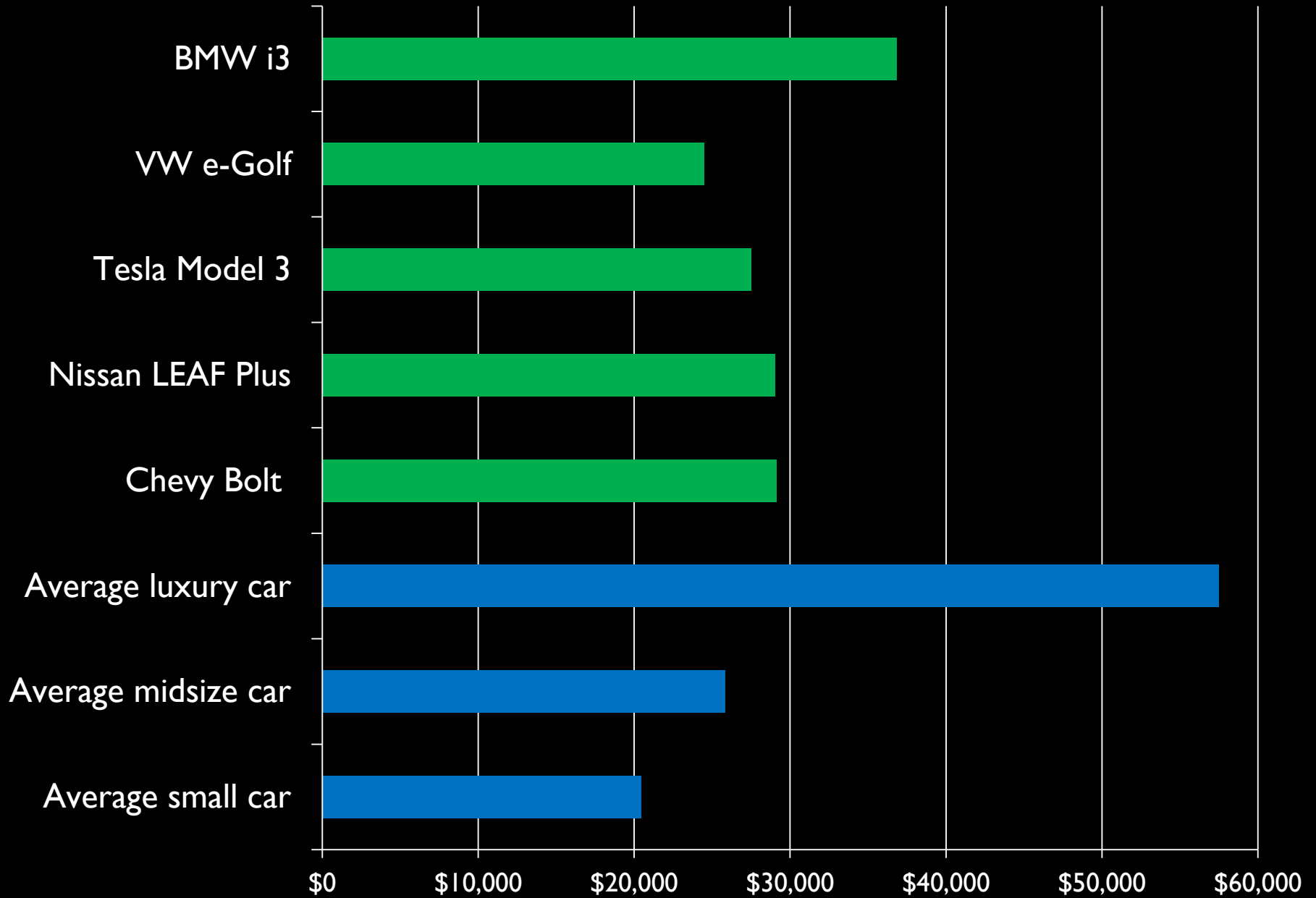
Barriers

- Upfront cost
- Access to charging in multi-unit dwellings or street parking situations.
- General public awareness

Dec. 2018 Average MSRP & 2019 EV MSRP



Dec. 2018 Average MSRP & 2019 EV MSRP - \$7,500 federal tax credit



Q22 I am aware of plug-in electric vehicle incentives (such as tax credit/rebate, high occupancy lane access, reduced tolls, lower vehicle registration rates, or discounted electricity rates) offered by:

	NE		CA	
	Yes	No	Yes	No
The federal government	17.46%	82.54%	21.89%	78.11%
My state government	15.68%	84.32%	23.75%	76.25%
My local community	2.56%	97.44%	4.50%	95.50%
My electricity provider	2.77%	97.23%	4.51%	95.49%
My employer	0.12%	99.88%	1.55%	98.45%
None of the above	74.89%	25.11%	56.47%	43.53%

**Union of
Concerned Scientists**

A person with long hair, wearing a red life vest and a dark long-sleeved shirt, is seen from behind, sitting in a red kayak on a calm body of water. The water reflects the light from the sky. In the background, there is a large, snow-capped mountain range under a clear sky. The overall scene is peaceful and scenic.

{ Thank You