



Total Greenhouse Gas Emissions in 2013 = 6.7 Billion Metric Tons of CO₂ equivalent. Nearly 30% of these emissions were in the transportation sector.

Path to Zero Emissions

Electric vehicles produce zero tailpipe emissions. Plug-in hybrid vehicles use no fossil fuel and have zero tailpipe emissions while driving within their all-electric range. If the batteries of these vehicles are charged directly from renewable sources (e.g. rooftop solar PV) off the electrical grid, then the greenhouse gas emissions are essentially zero.

Traditional hybrid vehicles and other high MPG cars that still burn gasoline do have lower emissions than most older cars – but not zero.

Cost Per Mile

Cost per mile will always be cheaper with electric vehicles. The cost for electricity to power plug-in vehicles for all-electric operation has been estimated at less than one half to one quarter of the cost of gasoline operation.



Electric vehicles provide a pathway to sustainable transportation—particularly when the electrical power used to operate the vehicle is derived from an inexhaustible/renewable source such as the rooftop solar or wind.

Financial Incentives

A federal tax credit of up to \$7,500 is available until Dec. 31, 2016. A Colorado tax credit of up to \$6,000 is also available.

Further Resources

Sierra Club: http://content.sierraclub.org/evguide/

All emission estimates from the *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013*

re you treading lightly? Our energy footprint is a moral set of choices we make for ourselves, our progeny, and our planet. The Green First Task Force provides information to help you make better choices. Reach out to us with your questions.

Your local Go2 Green Guide: *Electric Vehicles* - Milt Hetrick



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LIVING OUR VALUES SERIES

Guide to Electric

Vehicles:

transportation without burning carbon





Pick A Plug-In

There are many terrific plug-in electric vehicles (EVs) on the market today. In 2012 there were only three choices. In 2015 there are now close to 40 models of electric vehicles on the market. Some are listed in the EV Options Table

Selecting the best option can be a daunting task. The Sierra Club developed a web site to help. (http://content.sierraclub.org/evguide/)

By answering their short quiz, you can find which plug-in electric cars, if any, are best for your lifestyle. There is no overall best EV. It all depends on how many miles a day you drive, whether you take frequent long trips, whether you have a place to plug in the car, how much money you're prepared to spend, etc. Here's a list of the key questions you will need to answer:

- 1) How many miles total do you drive in a typical day?
- 2) For long trips, would you consider using another car in household, renting, carsharing, carpooling, or taking bus/train/plane?
- 3) Do you have access to an electrical outlet in a garage or driveway at home or at work?
- 4) Minimum number of seats needed?
- 5) What's your maximum budget for a vehicle?
- 6) For plug-in hybrids, how important to you is fuel economy when it's in hybrid mode?

All Electric Models		Plug-In Hybrid Models	
	Electric Range <u>Purchase</u> (Seats)		Electric Range (Seats) <u>Purchase</u>
TESLA MODEL S	265 mi _{\$62,400} - (7) \$72,400	BMW i3 WITH RANGE EXTENDER	72 mi (4) \$38,650
MERCEDES B-CLASS ELECTRIC DRIVE	87 mi \$34,875 (5)	CHEVROLET VOLT	38 mi (4) \$27,510
FIAT 500E	87 mi (4) \$25,000	FORD C-MAX ENERGI	21 mi (5) \$28,463
NISSAN LEAF	84 mi \$21,300– (5) \$27,340	FORD FUSION ENERGI	21 mi (5) \$30,835
<u>CHEVROLET</u> <u>SPARK EV</u>	82 mi (4) \$19,995	HONDA ACCORD PLUG-IN	13 mi (5) \$36,944
BMW i3	81 mi (4) \$34,800	TOYOTA PRIUS PLUG-IN	11 mi (5) \$28,358
FORD FOCUS EV	76 mi (5) \$22,495	* Prices include Federal Tax Credits of up to \$7,500 but do not include Colorado Tax Credits of up to \$6,000.	
SMART FORTWO ELECTRIC DRIVE	68 mi (2) \$18,250		
MITSUBISHI i	62 mi \$22,475-		

\$24,475

ELECTRIC VEHICLE OPTIONS - 2015

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