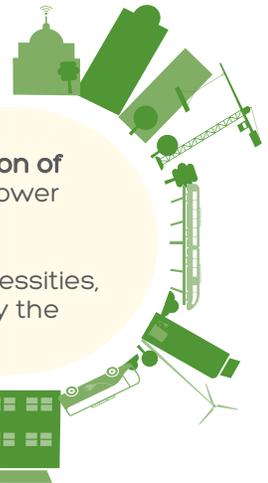


What will be the impact of a growing electric vehicle market on the economy?

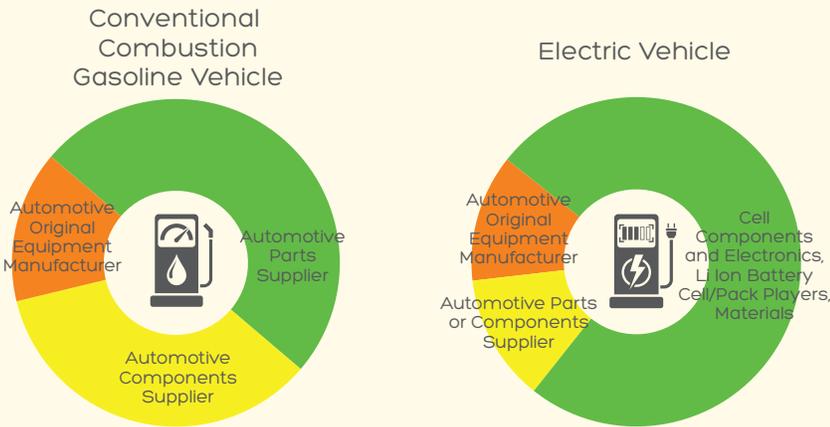


According to the US Energy Information Administration, **over 80 percent of the cost of a gallon of gas immediately leaves the local economy**.¹ As gas prices climb, retailers typically charge a lower markup in an attempt to compete, thereby reducing local profits even more.²

If a fraction of what is spent annually on personal transportation is spent on other daily necessities, it has the potential to bolster job growth and build wealth within local economies. A study by the California Electric Transportation Coalition found that each dollar saved on gas and spent on other household goods and services generates sixteen jobs in the state.³

Electricity used in this region is generated in Texas, which means your money supports the Texas economy whether you get your electricity from a conventional utility, community solar and wind farms, or your own rooftop solar panels.

VEHICLE JOB CENSUS NOT FEWER JOBS, JUST DIFFERENT JOBS⁴



Direct jobs are created through increased production by firms that make plug-in electric vehicles (PEVs), PEV components, and PEV infrastructure. Indirect jobs are those tied to firms that supply to these direct producers. Further, higher employment in direct and indirect jobs leads to more spending in the broader economy. These create induced jobs in industries like food, clothing, and entertainment. One leading estimate of total job creation from PEVs - direct, indirect, and induced - is that provided by the BlueGreen Alliance/American Council for an Energy-Efficient Economy. The organization predicts that the federal vehicle standards passed in 2012 will result in the creation of 570,000 jobs, including 50,000 in vehicle manufacturing.⁵

What about the battery?

A 2015 study published in Nature Climate Change determined that "industry-wide cost estimates declined by approximately 14 percent annually between 2007 and 2014," and further found that, "the cost of battery packs used by market-leading... manufacturers are even lower, at \$300 per kWh."



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¹ U.S. Energy Information Administration. (2012, September 10). Gasoline and Diesel Fuel Update. Retrieved from <http://www.eia.gov/petroleum/gasdiesel/> 2 Ibid. 3 California Electric Transportation Coalition. (2012). Plug-in Electric Vehicle Deployment in California: An Economic Jobs Assessment. Retrieved from <http://www.caletc.com/wp-content/uploads/2012/11/Economic-Jobs-Assessment-Exec-Summary.pdf> 4 McKinsey Quarterly. (2009, June). Electrifying cars: How three industries will evolve. Hensley, R., Knupfer, S. & Pinner, D. Retrieved from https://www.mckinseyquarterly.com/Electrifying_cars_How_three_industries_will_evolve_2370 5 BlueGreen Alliance/American Council for Energy-Efficient Economy. (June 2012). Gearing Up: Smart Standards Create Good Jobs Building Cleaner Cars. Washington, D.C. Retrieved from <http://www.drivinggrowth.org/wpcontent/uploads/2012/06/BGA-Auto-Report.pdf>

How does the Cost of Ownership for an EV compare to a gasoline-powered car?

	Mileage	Internal Combustion Engine		Electric Vehicle	
		\$	Trips	\$	Trips
Tires	Every 7,500 miles	\$400	13	\$400	13
Oil Change	Every 5,000 miles	\$400-\$800	20	\$0	0
Automatic Transmission Fluid	At 100,000 miles	\$30-\$100	1	\$0	0
Fuel ^b	varies	\$7,142	400	\$3,500	166
Spark Plugs & Wires	within first 100,000 miles	\$200	1	\$0	0
Muffler	within first 100,000 miles	\$100-\$250	1	\$0	0
Brakes ^c	2x within first 100,000 miles	\$400	2	\$200	1
Big 100,000	100,000 miles				
	Timing Belt	\$600-\$800	1	\$0	0
	Water Pump	\$300 (if combined with timing belt service)	1	\$0	0

Electric drivetrains are approximately three to four times more efficient than gasoline engines.⁶

WHAT ABOUT THE COST OF ADDITIONAL ELECTRICITY?

Electric vehicles have the potential to decrease, or at least moderate the growth of, utility rates. Electric vehicles typically charge at night, when electricity is cheapest to generate. By balancing the demand for electricity between day and night, electric vehicles decrease the average cost of electricity. Thus, overall rates decrease. Choosing an electricity plan that offers free nights and weekends is a great way to take advantage of this.

Time is money. By not having to detour to and visit gasoline stations to refuel an electric car, it's estimated you save 10 minutes a week, which might be worth \$33 per month.⁷ Over five years of ownership, that's nearly \$2,000 back in your pocket!

AN EV IN YOUR DRIVEWAY? MAKE IT HAPPEN!

Last year EV sales grew by about 60 percent worldwide. That's an interesting number, because it's also roughly the annual growth rate that Tesla forecasts for sales through 2020, and it's **the same growth rate that helped the Ford Model T cruise past the horse and buggy** (and the original EVs!) in the 1910s. For comparison, solar panels are following a similar curve at around 50 percent growth each year, while LED light-bulb sales are soaring by about 140 percent each year.⁸

Purchasing New? Depending on the model you're considering, you may be eligible for up to \$7500 in federal tax rebates! Be sure to pick up or print out a copy of the "Guide to Claiming the Federal Incentive for Electric Vehicles" from NCTCOG or on www.dfwcleancities.org/evnt for a current list of eligible vehicles.

Purchasing Used? Don't forget, great deals are available on used EVs! Check with dealerships and third-party sellers for available makes and models.

Considering a Lease? Seven EV models currently offer leases for payments under \$200 a month, and the money you save on fuel can go a long way toward offsetting that cost. Plus, in addition to the tax rebates for new purchases, the federal government incentive extends to leases, also - these can help offset your down payment.

