

de la Guerra, Sheila



#5

From: Katie Davis <kdavis2468@gmail.com>
Sent: Monday, March 18, 2019 4:08 PM
To: sbcob
Subject: Re: March 19 Agenda Item #5
Attachments: Sierra Club Los Padres Chapter re SB County Fleet Electrification.pdf

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Hi -- I had a minor math error in the letter submitted earlier. If possible to replace with this updated version, that would be great, but okay if not possible.

Thanks,
Katie

On Mon, Mar 18, 2019 at 11:55 AM Katie Davis <kdavis2468@gmail.com> wrote:

Please refer to attached comment letter on "Agenda Item #5: Consider recommendations regarding an Electric Vehicle Update"

Regards,
Katie Davis
Chair, Sierra Club Los Padres Chapter



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Hugh Warren

Ventura Network Rep

Elizabeth Lamar

PO Box 31241
Santa Barbara CA
93130-1241

March 18, 2019

Santa Barbara County Supervisors
105 East Anapamu Street, 4th Floor
Santa Barbara 93101
Via email: sbcob@co.santa-barbara.ca.us

RE: March 19 Agenda Item #5: Consider recommendations regarding an Electric Vehicle Update

Dear Santa Barbara County Supervisors,

Studies have found that the total cost of ownership for electric vehicles (EVs) is less than conventional vehicles. For instance, "Electric Vehicles Have Lowest Total Cost Of Ownership, Study Finds"¹

The costs in the county's "Electric Vehicle Analysis" are incorrect and overstated for the following reasons:

- **Overstated Price Differential:** The report claims that a Bolt would cost \$33,000 "after rebates and incentives" compared to \$20,000 for a gasoline car. However, a Bolt is advertised at Rydell Chevrolet in Northridge for \$29,795 before negotiation or rebates. Governments are eligible for \$2,500 state rebate and can benefit from the \$7,500 federal tax credit. Prices for EVs continue to decrease relative to gasoline cars, such that the actual price differential is likely to be much less than stated. That \$10,000 could cover the price differential.
- **Overstated Charging Infrastructure:** Charging infrastructure should be considered separately. However, if you are going to consider as part of this plan, consider various alternatives. Don't add in the entire price in the first year.
 - Consider lower cost alternatives: \$7,700 is an excessively high cost considering you can buy a level 2 charger for \$400. You can also plug an EV into a regular outlet, use existing stations, or seek grants.
 - Amortize over the life of the infrastructure: The report says, "Maintenance, depreciation, and subscription fees for each charger will average approximately \$700 annually" so over 5 years the cost would be \$3,500, not \$7,700.
 - Share charging infrastructure: EVs can easily share charging stations, and long range EVs do not have to be charged every day. A charger per car is excessive and unnecessary.
- **Understated Fuel Savings:** \$2,700 in fuel savings over 5 years is just \$540 per year. Cost for fuel is generally about 50% of gasoline. If you spend \$2,000 a year on gas, the savings for EV should be nearly \$1,000 per year, or \$5,000 over 5 years. You can save further by decreasing electric costs with solar.

¹ Electric Vehicles Have Lowest Total Cost Of Ownership, Study Finds
(<https://cleantechnica.com/2018/02/05/new-study-finds-electric-vehicles-offer-lowest-total-cost-ownership/>)

- **Missing Repair and Maintenance Savings:** Maintenance and repair costs are 2 to 3 times higher for gasoline cars. EVs benefit from not requiring oil changes or other maintenance costs for exhaust systems. Regenerative braking causes less wear on brakes. Using a conservative calculation of about 3 cents per mile of maintenance cost in an EV versus closer to 6 cents in an internal combustion car, that's \$450/year in savings or \$2,250 over five years.
- **Artificially Short Time Horizon:** The five-year horizon disadvantages EVs because it gives less time for the fuel and maintenance savings to compensate for any purchase price differential. At 15,000 miles per year, it would take about 7 years to reach the 100,000 miles. Over 7 years or 100,000 miles, you could expect to save around \$10,000 in fuel and maintenance costs.

In summary, the total cost of ownership of EVs is less than gasoline cars. We believe that the price differential after rebates would be close to zero and the savings would be approximately \$10,000 per car over the course of 100,000 miles or a **net savings** of \$1,240,000 for 124 cars that could be used to build out county charging infrastructure.

The analysis also leaves out the substantial health benefits from reducing pollution. In addition to GHG reductions, EVs also don't produce local air pollution that contributes to a range of health issues. The health effects of air pollution are serious – one third of deaths from stroke, lung cancer and heart disease are due to air pollution. This is having an equivalent effect to that of smoking tobacco. Air pollution costs the global economy more than \$5 trillion annually. Within the United States, California suffers the worst health impacts from air pollution, with about 21,000 early deaths annually, mostly attributed to road transportation.²

You should direct staff to pursue Strategy 4 – MIX OF SHORT RANGE / LONG RANGE EVs and HYBRID, and come up with a charging infrastructure and solar plan that reduces the charging costs and increases fuel savings relative to this analysis. Staff should also reach out to municipalities that are ahead of us with fleet electrification experience, such as Santa Monica, which will be at 80% EVs by 2020, and apply best practices to ensure fleet electrification success.

Regards,



Katie Davis, Chair
Los Padres Chapter of the Sierra Club
Santa Barbara and Ventura Counties


² Study: Air pollution causes 200,000 early deaths each year in the U.S., MIT NEWS
(<http://news.mit.edu/2013/study-air-pollution-causes-200000-early-deaths-each-year-in-the-us-0829>)

Example of discounted public price for Bolt EV – BEFORE \$10,000+ in tax incentives and rebates.

NEW 2019 CHEVROLET BOLT EV
5dr Wgn LT

RYDELL BEST PRICE \$29,795
MSRP \$38,310

See Important Disclosures Here



22 photos

VIDEO AVAILABLE

SPECIFICATIONS	CURRENT OFFERS				
Stock Number	191262 MSRP \$39,910				
Exterior	Summit White Rydell Sale Price \$37,593				
Interior	Dark Galvanized/Sky Cool Bolt EV - LT Rydell Discount ¹ -\$2,500				
Drive Wheels	Green Stand-Alone % Off Customer Cash ² -\$600				
Engine	FWO Take Delivery By 02/29/2019 Rydell Weekend Bonus Cash ³ -\$500				
Transmission	1-Speed A/T Take Delivery By 03/31/2019				
VIN	1G1FY6S0K4124947 Conquest % Cash Back Private Offer ⁴ -\$1,532				
Trim	5dr Wgn LT Cash Allowance ⁵ -\$2,666				
Fuel Type	Electric Take Delivery By 03/31/2019				
<table style="width: 100%; border: none;"> <tr> <td style="font-weight: bold; font-size: small;">Rydell Best Price</td> <td style="text-align: right; font-weight: bold; font-size: small;">\$29,795</td> </tr> <tr> <td style="font-size: x-small;">Total Savings</td> <td style="text-align: right; font-size: x-small;">\$8,515</td> </tr> </table>		Rydell Best Price	\$29,795	Total Savings	\$8,515
Rydell Best Price	\$29,795				
Total Savings	\$8,515				

Example of discounted government pricing:

Santa Monica recently joined a number of other cities to purchase or lease EVs for fleet vehicles at reduced prices through the *Climate Mayors EV Purchasing Collaborative*. Prices and details about the procurement process are available on the website. (<https://driveevfleets.org/>)

Note that a Nissan Leaf is advertised on the site for \$26,528 before rebates, compared to the \$29,000 after rebates cited in the staff report.

Santa Monica Contacts: Ryan Kraemer, Santa Monica Street & Fleet Services division (Ryan.Kraemer@smgov.net) or Ariana Vito, EV Program Coordinator (Ariana.Vito@smgov.net)