

Testimony to the House Environment and Transportation Committee
HB 359 Clean Cars Act of 2020 – Extension, Funding, and Reporting
Position: Favorable With Amendments

13 February 2020

House Environment and Transportation Committee
Room 251, House Office Building
Annapolis, MD 21401

Honorable Chair Barve and Members of the House Environment and Transportation Committee,

My name is Scott Wilson, and I currently drive an all-electric 2017 Chevy Bolt EV and 2013 Nissan Leaf. I serve on the Maryland Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC), and I'm also Vice President of the Electric Vehicle Association of Greater Washington DC (EVADC). I support passage of HB 359 with amendments.

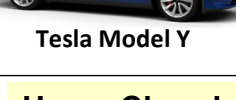
An ongoing problem with the plug-in electric vehicle excise tax credit is that, **due to demand**, funding runs out too early in the fiscal year. The result is that, while on paper the tax credit is available, as a practical matter car buyers are immediately placed on a waiting list, to await replenishing the credit in the next legislative session. Once those in line are made whole, there is a narrow window of a few months when the credit is available as originally intended, then funding runs out and the cycle repeats. Thus an effective tool for car dealers to sell more plug-in electric vehicles is de facto neutered.

There are two good solutions, both of which should be pursued as amendments.

Amendment #1: Pay off the backlog, then increase the funding for the credit. The projected backlog in this cycle is \$12M. The funding for the next cycle should be closer to \$25M, thus the funding in HB 359 should be \$37M. At \$3000 per car, the credit would increase plug-in vehicle registrations by about 8300, making a total of 33,300 registrations, which is closer (though still far from) Maryland's greenhouse gas reduction inspired goal of 300,000 by 2025. The next legislative session should then consider waiving the excise tax credit for new plug-in electric vehicle purchases, in the manner currently done in New Jersey. Studies have shown that waiving the excise tax *for only four successive years followed by resumption*, would put Maryland on a trajectory to attain its stated electric vehicle target, and the forgone tax revenue would be made back in 10 years.

Amendment #2: More narrowly focus the credit to more effectively utilize limited funds. The allowable battery capacity for the excise tax credit should be raised from 5 kWh to 30 kWh. The effect would be to focus the credit where it most effectively addresses GHG emission by excluding plug-in hybrid vehicles and including only fully electric vehicles. As an example, given the grid mix where I live in Montgomery County, my all electric Chevy Bolt has 28% of the carbon emission a similar gas vehicle would have. This would also better align the effect of the excise tax credit with the electric vehicle goals in Gov. Hogan's Greenhouse Gas Reduction Plan.

Thank you for your time,
Scott Wilson



All Electric	Base Price (USD) ¹	Net Price (USD) ²	Range (mi) ³	Batt. (kWh)	Power (kW) ⁴	0-60 (sec)	QC (kW) ⁵	MPG equiv ³	Fuel / Mo. ⁶	
Chevy Bolt	\$36,620	\$34,745	259	66	150	6.5	50	118	\$46	
Fiat 500e	\$33,460	\$25,960	84	24	83	8.9	N/A	112	\$50	
Harley LiveWire	\$29,799	\$27,299	95*	15.5	78	3.0*	20^	95*	---	
Honda Clarity Elec.	\$36,620	(lease only)	89	25.5	120	---	25^	114	\$50	
Hyundai Ioniq Elec.	\$32,000^	\$24,500^	170	38.3	100	9.5	75	133	\$42	
Hyundai Kona Elec.	\$37,190	\$29,690	258	64	150	6.4	75^	120	\$46	
Kia Niro EV	\$38,500	\$31,000	239	64	150	7.8	77	112	\$50	
Kia Soul EV	\$35,000^	\$27,500^	243	64	201	7.6	77	114	\$50	
MINI Electric	\$29,900	\$22,400	110	32.6	135	6.9	50	---	---	
Nissan LEAF S	\$31,600	\$24,100	150	40	110	7.4	50	112	\$50	
Nissan LEAF S Plus	\$38,200	\$30,700	226	62	160	6.4	100	108	\$50	
VW e-Golf	\$31,895	\$24,395	123	35.8	100	8.5	50	113	\$50	
Zero SR/F	\$19,495	\$17,545	109*	14.4	82	3.3^	N/A	---	---	
Average U.S. Gasoline Car Price		\$35,000								
Audi e-tron	\$74,800	\$67,300	204	95	265	5.5	150	74	75	
BMW i3	\$44,450	\$36,950	153	42.2	125	7.2	50	113	\$50	
Ford Mustang Mach-E	\$50,600	\$43,100	230*	76	142	6.1	150	---	---	
Jaguar I-Pace	\$69,850	\$62,350	234	90	294	4.5	50	76	\$71	
Polestar 2	\$63,000	\$55,500	275	78	300	4.7	150	---	---	
Porsche Taycan 4S	\$103,800	\$96,300	170^	79.2	390	3.8	270	70^	---	
Porsche Taycan Turbo	\$150,900	\$143,400	201	93.4	500	3.0	270	69	\$79	
Rivian R1S 135	\$82,500^	\$75,000^	310*	135	562^	3.0*	160^	---	---	
Rivian R1T 135	\$79,000^	\$71,500^	300*	135	562^	3.0*	160^	---	---	
Tesla Cybertruck Dual	\$49,900	\$49,900	300*	120^	515^	4.5*	250^	---	---	
Tesla Model 3 Std.	\$35,000	\$35,000	220	50	211	5.6	100	131	\$42	
Tesla Model 3 Std. Plus	\$39,990	\$39,990	250	54	211	5.3	100	141	\$38	
Tesla Model 3 Long Range AWD	\$48,990	\$48,990	322	75	335	4.4	250	121	\$46	
Tesla Model Y Long	\$48,000	\$48,000	300*	75^	211^	5.5	---	---	---	
Tesla Model S	\$79,990	\$79,990	373	100	398	3.7	200	111	\$50	
Tesla Model X	\$84,990	\$84,990	328	100	398	4.4	200	96	\$58	
Tesla Roadster	\$200,000	\$200,000	620	200^	---	1.9	350^	---	---	
Volvo XC40 Recharge	\$55,000^	\$47,500^	200*	78*	300	4.7	150	---	---	



EVA/DC meets the 3rd Wednesday of every month. See evadc.org/meeting.

Home Charging

Typically costs 4 ¢ / mile. (3 mi / kWh, 12 ¢ / kWh)

Charge using an ordinary 120V outlet. Dedicated circuit recommended.



Install a home 240V charging station for faster charging at home. \$400-\$1000 + installation

240V Home Charging Station

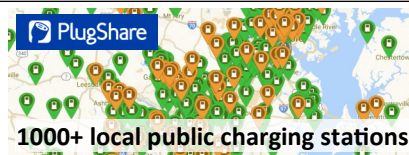


Public Charging

Cost varies, free - 49 ¢ / kWh



240V Public Charging Station



Level 1: 120V AC (regular outlet)
Reclaim 5 miles per hour charging

Level 2: 240V AC (J1772 / dryer plug)
Reclaim 15-60 miles per hour charging

Fast Charge: 480V DC
Reclaim 50-200 miles in 30 minutes

EVA/DC is providing the following for informational purposes only. We do not endorse or recommend any specific vehicle manufacturer or distributor. Information subject to change. © 2020 EVA/DC

1. Base price before tax incentives, destination.
2. Net price after federal tax credit. State credits may still apply. Consult tax advisor.
3. EPA combined city/highway, except as noted
4. Total motor power. 1 kW = 1.34 hp

5. DC Quick / Fast Charge max rate
 6. EPA, 15000 miles/year, 12¢ / kWh
- * Source: Vehicle Manufacturer
^ Estimate



Fusion



Ioniq



Sonata



MINI



Mitsubishi Outlander



Subaru Crosstek



RAV4



330e



530e



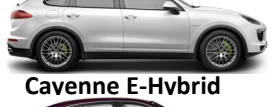
745e



Land Rover P400e



Cavenne E-Hybrid



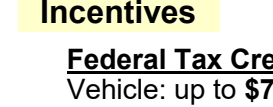
Panamera 4 E-Hybrid



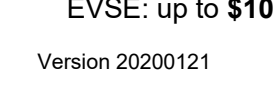
Volvo V60



Volvo S60



Volvo S90



Volvo XC60



Volvo XC90

Plug-in Hybrid Electric	Base Price (USD) ¹	Net Price (USD) ²	Range (mi) ³	Batt. (kWh)	0-60 (sec)	MPG equiv ³	Fuel / Mo. ⁶
Chrysler Pacifica hyb.	\$39,995	\$32,495	32+gas	16	7.4	82	\$83
Ford Fusion Plug-In	\$35,000	\$30,391	26+gas	9	8.0	103	\$63
Honda Clarity PHEV	\$33,400	\$25,900	48+gas	17	7.7	110	\$58
Hyundai Ioniq PHEV	\$26,500	\$21,957	29+gas	8.9	8.9	119	\$54
Hyundai Sonata PHEV	\$31,400	\$26,481	28+gas	9.8	7.6	99	\$67
Kia Niro PHEV	\$28,500	\$23,957	26+gas	8.9	9.0	105	\$58
Kia Optima Plug-In	\$36,090	\$31,171	28+gas	9.8	9.1	101	\$67
MINI Cooper S E Countr.	\$36,900	\$32,900	17+gas	10	6.7	73	\$108
Mitsubishi Outlander	\$36,295	\$30,459	22+gas	12	9.2	74	\$100
Subaru Crosstek Hyb.	\$35,145	\$30,645	17+gas	8.8	8.3	90	\$79
Toyota Prius Prime	\$27,750	\$23,250	25+gas	8.8	10.5	133	\$50
Toyota RAV4 Prime	\$36,500 [^]	\$29,000 [^]	39 [*] +gas	16 [^]	5.8 [*]	90 [*]	---
Average U.S. Gasoline Car Price		\$35,000					
BMW 330e	\$45,000 [^]	\$39,164 [^]	30 [^] +gas	12 [^]	5.6	---	---
BMW 530e	\$53,900	\$48,064	21+gas	12	5.9	69	\$113
BMW 745e xDrive	\$95,550	\$89,714	16+gas	12	4.9	56	\$150
BMW i3 Range Extender	\$48,300	\$40,800	126+gas	42.2	8.0	100	\$58
BMW i8	\$147,500	\$141,831	17+gas	11.6	4.2	69	\$121
BMW X3 xDrive30e	\$48,550 [^]	\$42,714 [^]	20 [*] +gas	12 [^]	6.3	---	---
BMW X5 xDrive45e	\$70,000 [^]	\$62,500	40 [^] +gas	24	5.5 [^]	56	\$138
Karma Revero GT	\$135,000	\$127,500	61+gas	28	4.5	70	\$92
Land Rover Sport P400e	\$79,000	\$71,913	19+gas	13	6.3	42	\$175
Mercedes C350e	\$48,895	\$45,394	8+gas	6.2	5.8	51	\$121
Mercedes GLC350e	\$50,650	\$46,190	10+gas	8.7	6.2	56	\$138
Mercedes GLE550e	\$66,700	\$62,240	8+gas	8.8	5.3	43	\$163
Mercedes S560e	\$109,750	\$103,750	20+gas	13.5 [^]	4.7	65 [^]	\$125 [^]
Porsche Cayenne	\$81,100	\$74,430	14+gas	14.1	4.7	47	\$154
Porsche Panamera	\$103,800	\$97,130	14+gas	14.1	4.4	51	\$154
Volvo S60 T8	\$56,045	\$51,043	22+gas	10.4	4.3	69	\$104
Volvo S90 T8	\$63,845	\$58,843	21+gas	10.4	4.8	60	\$113
Volvo V60 T8	\$67,300	\$62,298	22+gas	10.4	4.3	69	\$104
Volvo XC60 T8	\$54,595	\$49,593	19+gas	10.4	4.9	57	\$125
Volvo XC90 T8	\$67,000	\$61,998	18+gas	10.4	5.9	55	\$125

PHEV — Plug-in Hybrid Electric Vehicle (Electric & Gas) - All these hybrids have a plug.



Pacifica minivan



Honda Clarity PHEV



Kia Niro



Kia Optima



Prius Prime



i3



i8



X3



X5



Karma



Mercedes C350e



Mercedes S560e



Mercedes GLC350e

DC: EV Supply Equipment (EVSE) Tax Credit - 50% of cost up to \$1000
Excise tax exemption. Reduced vehicle registration fee of \$36

Maryland: Excise Tax Credit, \$100/kWh Battery, max \$3000 on EVs priced ≤\$60K
EV Supply Equipment (EVSE) Tax Credit - 40% of cost, max \$700
High Occupancy Vehicle (HOV) Lane Exemption through Oct. 2022

Virginia: Reduced personal property tax in Arlington and Loudon counties
Discounted electricity rates for off-peak residential EV charging

Incentives
Federal Tax Credits
Vehicle: up to \$7500
EVSE: up to \$1000