

Path to Prosperity

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Lower Auto Excise Taxes Add Incentives for Hybrid Vehicles

By Martin Sheehan

Exciting new hybrid vehicles offer the promising combination of the full-sized cars, trucks and SUVs that Americans want with the higher fuel efficiency Americans need to reduce petroleum consumption, lower the nation's dependence on foreign oil and take advantage of lower tailpipe emissions that result from burning less fuel per mile.

Hybrid vehicle options have expanded beyond the first curiosities like the original two-seater Honda Insight to include comfortable sedans, and the all-wheel-drive trucks and SUVs preferred by many Maine families. Like most new technologies, there is a premium charged for a hybrid over a similar conventional vehicle, but drivers have been buying relatively low numbers of hybrids for reasons beyond the simple economics. These reasons include the experience of driving the latest technology, the real desire to use fewer gallons of fuel, the personal involvement in lowering environmental pollution, and the "green" image that hybrid drivers enjoy^[1].

The economic advantages of hybrid vehicle ownership are real, and the calculations vary as the fuel prices increase and decrease as the worldwide demand for petroleum fluctuates. A study of seven assorted new hybrid vehicles by The Maine Heritage Policy Center shows fuel savings of between 143 and 258 gallons per year for hybrid drivers traveling 15,000 miles annually versus a similar non-hybrid vehicle^[2]. Whether gasoline prices are \$2 or \$4 or \$6 a gallon, the fuel cost savings are realized by hybrid drivers each time they fill up.

Another significant advantage for hybrid vehicle drivers is available through LD 974 "An Act To Decrease the Automobile Excise Tax and Promote Energy Efficiency." While this proposal reduces Maine's high Auto Excise Tax for all newer vehicles, it includes enormous advantages for buyers of hybrid, high-tech and other high mileage (40+ mpg highway) vehicles. To promote energy savings and make the purchase of a new hybrid or other high-mileage vehicle a reality for thousands more Maine buyers, this proposal eliminates the Sales Tax at purchase and the first three years of Auto Excise Taxes on these vehicles.

For example, the Toyota Prius is the best selling hybrid, with 701 new 2008 and 2009 models registered in Maine through January 26, 2009^[3]. The 2009 Prius base model has a Manufacturer's Suggested Retail Price (MSRP) of \$24,095. (This MSRP is important, because it is the figure used to assess Maine's Automobile Excise Tax.) According to Edmunds.com, the typical negotiated "True Market Value" price for this model in southern Maine is \$22,071^[4]. Assuming the purchaser negotiates a \$4,000 trade-in value on their old car, the net transaction cost is \$18,071. Maine's 5% Sales Tax is assessed on this amount, which adds \$904 to the price paid for a gross cost of \$18,975. The buyer has used their trade-in as the down payment, and will finance the purchase for 60 months at 7.0% interest. According to Bankrate.com, this yields a monthly payment of \$376^[5].

The Auto Excise Tax due at registration means that another \$578 must be paid within a few weeks of buying this vehicle. The annual Auto Excise Taxes due at registration are declining amounts for the second through fifth years of \$422, \$325, \$241, and \$157. The five-year total for the Sales and Auto Excise Taxes on this vehicle are \$2,626... which equals about seven monthly payments for this car owner.

LD 974 makes significant changes to these figures. Under the tax relief and hybrid/high-mileage incentives in this proposal, the same 2009 Prius used for the previous example has the same MSRP of \$24,095; the same "True Market Value" of \$22,071; and the buyer will still get \$4,000 for their trade-in. Without any Sales Tax however, the amount financed is reduced to \$18,071 which results in a lower monthly payment of \$358^[6]. In addition to saving

\$18 a month, the buyer pays no Auto Excise Taxes for the first three years, then reduced amounts of just \$96 in years four and five. For this Prius buyer, the savings over five years are \$2,434 in Sales and Auto Excise Taxes... plus 1,289 gallons of gasoline (*whatever that will cost in five years!*).

With the passage of LD 974, similar savings will be in place for Maine buyers of the new Volkswagen diesel Jetta sedans and wagons, the Ford Escape and Fusion hybrids, the Honda Civic and all-new Insight sedan hybrids, several Toyota and Lexus hybrid cars and SUVs, plus hybrid pick-up trucks and full-size SUVs from Chevrolet and GMC.

In summation, the eight high-mileage and hybrid vehicles expense and fuel savings data detailed on the accompanying two pages suggests a “ballpark estimate” of some 1,000 gallons of fuel saved in the first five years of driving one of these vehicles versus a similar conventional car, truck or SUV. The proposed incentives in LD 974 will encourage Maine drivers to replace their old cars with thousands of new high-mileage and hybrid vehicles to Maine roads; which means that millions of gallons of gasoline and diesel fuel will not be purchased and burned in Maine.

Notes and Sources

- [1] JD Power and Associates www.jdpower.com
- [2] Analysis of fuel economy figures from the 2009 Fuel Economy Guide produced by the U.S. Department of Energy and additional updated figures for 2010 models from www.edmunds.com
- [3] Report from Maine Bureau of Motor Vehicles, Vehicle Services Division, January 26, 2009.
- [4] Manufacturers’ Suggested Retail Prices (MSRP) and “True Market Value” prices from www.edmunds.com
- [5] Typical Monthly Payments based on negotiated price plus 5% Sales Tax; minus a trade-in value of \$4,000; and this total being borrowed on a 60-month loan at an even 7.0% interest rate, as calculated at www.bankrate.com
- [6] Typical Monthly Payments based on negotiated price plus 5% Sales Tax; minus a trade-in value of \$4,000; and this total being borrowed on a 60-month loan at an even 7.0% interest rate, as calculated at www.bankrate.com

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Path to Prosperity is a special series of publications by The Maine Heritage Policy Center which focus on Maine’s overspending and the resulting tax burden that threaten long-term, stable, sustainable prosperity. All information is from sources considered reliable, but may be subject to inaccuracies, omissions, and modifications.

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Review of Hybrid and High Mileage Vehicles - Maine's Purchase, Operating and Tax Costs. Current & Proposed Tax Rates

	A 2009 Volkswagen Jetta Diesel 4 cyl A		B 2010 Honda Insight LX Hyb A		C 2009 Honda Civic Hybrid 4 cyl A		D 2009 Toyota Prius Hyb 4 A		E 2010 Ford Fusion Hyb A		F 2009 Ford Escape Hyb AWD		G 2009 Toyota Highlindr Hyb AWD		H 2009 Chevrolet Silverado Hyb AWD	
MSRP	\$24,070	\$20,470	\$24,330	\$24,070	\$24,330	\$24,095	\$28,490	\$32,120	\$35,445	\$42,145						
True Mkt Val \$	\$24,070	\$20,470	\$21,468	\$20,470	\$21,468	\$22,071	\$28,490	\$30,036	\$32,099	\$40,191						
Trade-In	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000						
Net Cost	\$20,070	\$16,470	\$17,468	\$16,470	\$17,468	\$18,071	\$24,490	\$26,036	\$28,099	\$36,191						
Sales Tax	\$1,004	\$824	\$873	\$824	\$873	\$904	\$1,225	\$1,302	\$1,405	\$1,810						
Gross Cost	\$21,074	\$17,294	\$18,341	\$17,294	\$18,341	\$18,975	\$25,715	\$27,338	\$29,504	\$38,001						
PAYMENT																
(60 mos @ 7%)	\$417	\$342	\$363	\$342	\$363	\$376	\$509	\$541	\$584	\$753						
Total Purchase	\$29,037	\$24,546	\$25,790	\$24,546	\$25,790	\$26,544	\$34,551	\$36,480	\$39,053	\$49,158						
MPG City, High, Avg	29 40 34	40 43 41	40 45 42	40 43 41	40 45 42	48 45 47	41 36 39	29 27 28	27 25 26	20 20 20						
Fuel \$ for 15K/yr @ \$2*	\$1,103	\$732	\$714	\$732	\$714	\$638	\$769	\$1,071	\$1,154	\$1,500						
Similar car's mpg #s	\$1,200	\$1,200	\$1,000	\$1,200	\$1,000	\$1,154	\$1,250	\$1,364	\$1,500	\$1,875						
Gallons Saved Per Year	159	234	143	234	143	288	240	146	173	188						
Gallons Saved in 5 Yrs	794	1,171	714	1,171	714	1,289	1,202	731	865	938						
Hybrid \$ Savings / yr	\$97	\$468	\$286	\$468	\$286	\$516	\$481	\$292	\$346	\$375						
Hybrid \$ Savings 5 Yrs	\$485	\$2,341	\$1,429	\$2,341	\$1,429	\$2,578	\$2,404	\$1,461	\$1,731	\$1,875						
Yr 1 Excise Tax	\$578	\$491	\$584	\$491	\$584	\$578	\$684	\$771	\$851	\$1,011						
Yr 2 Excise Tax	\$421	\$358	\$426	\$358	\$426	\$422	\$499	\$562	\$620	\$738						
Yr 3 Excise Tax	\$325	\$276	\$328	\$276	\$328	\$325	\$385	\$434	\$479	\$569						
Yr 4 Excise Tax	\$241	\$205	\$243	\$205	\$243	\$241	\$285	\$321	\$354	\$421						
Yr 5 Excise Tax	\$156	\$133	\$158	\$133	\$158	\$157	\$185	\$209	\$230	\$274						
Excise Tax; 5 Yrs	\$1,721	\$1,464	\$1,740	\$1,464	\$1,740	\$1,723	\$2,037	\$2,297	\$2,534	\$3,013						
Ttl Sls & Excise Taxes	\$2,725	\$2,287	\$2,613	\$2,287	\$2,613	\$2,626	\$3,262	\$3,598	\$3,939	\$4,823						
Extra Payments	7	7	7	7	7	7	6	7	7	6						

* All gasoline estimated at \$2.00 per gallon, regular fuel. Diesel is estimated at \$2.50 per gallon in these calculations.

Review of Hybrid and High Mileage Vehicles - Maine's Purchase, Operating and Tax Costs. Current & Proposed Tax Rates

Proposed

	A 2009 Volkswagen Jetta Diesel 4 cyl A		B 2010 Honda Insight LX Hyb A		C 2009 Honda Civic Hybrid 4 cyl A		D 2009 Toyota Prius Hyb 4 A		E 2010 Ford Fusion Hyb A		F 2009 Ford Escape Hyb AWD		G 2009 Toyota Highlndr Hyb AWD		H 2009 Chevrolet Silverado Hyb AWD	
MSRP	\$24,070	\$20,470	\$24,330	\$24,095	\$28,490	\$32,120	\$35,445	\$42,145								
True Mkt Val \$	\$24,070	\$20,470	\$21,468	\$22,071	\$28,490	\$30,036	\$32,099	\$40,191								
Trade-In	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000	-\$4,000								
Net Cost	\$20,070	\$16,470	\$17,468	\$18,071	\$24,490	\$26,036	\$28,099	\$36,191								
Sales Tax	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0								
Gross Cost	\$20,070	\$16,470	\$17,468	\$18,071	\$24,490	\$26,036	\$28,099	\$36,191								
PAYMENT																
(60 mos @ 7%)	\$397	\$326	\$346	\$358	\$485	\$516	\$556	\$717								
Total Purchase	\$27,845	\$23,568	\$24,753	\$25,470	\$33,096	\$34,932	\$37,380	\$46,998								
MPG City, High, Avg	29 40 34	40 43 41	40 45 42	48 45 47	41 36 39	29 27 28	27 25 26	20 20 20								
Fuel \$ for 15K/yr @ \$2*	\$1,103	\$732	\$714	\$638	\$769	\$1,071	\$1,154	\$1,500								
Similar car's mpg #s	22 29 25	21 30 25	25 26 30	21 31 26	20 29 24	19 25 22	17 23 20	14 20 16								
Similar car \$/15K/yr	\$1,200	\$1,200	\$1,000	\$1,154	\$1,250	\$1,364	\$1,500	\$1,875								
Gallons Saved PerYear	159	234	143	258	240	146	173	188								
Gallons Saved in 5 Yrs	794	1,171	714	1,289	1,202	731	865	938								
Hybrid Savings / yr	\$97	\$468	\$286	\$516	\$481	\$292	\$346	\$375								
Hybrid Savings 5 Yrs	\$485	\$2,341	\$1,429	\$2,578	\$2,404	\$1,461	\$1,731	\$1,875								
Yr 1 Excise Tax	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0								
Yr 2 Excise Tax	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0								
Yr 3 Excise Tax	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0								
Yr 4 Excise Tax	\$96	\$82	\$97	\$96	\$114	\$128	\$142	\$169								
Yr 5 Excise Tax	\$96	\$82	\$97	\$96	\$114	\$128	\$142	\$169								
Excise Tax; 5 Yrs	\$193	\$164	\$195	\$193	\$228	\$257	\$284	\$337								
Ttl Sls & Excise Taxes	\$193	\$164	\$195	\$193	\$228	\$257	\$284	\$337								
Extra Payments	0	1	1	1	0	0	1	0								
Five-Year Tax Savings	\$2,532	\$2,123	\$2,418	\$2,434	\$3,034	\$3,341	\$3,656	\$4,486								

* All gasoline estimated at \$2.00 per gallon, regular fuel. Diesel is estimated at \$2.50 per gallon in these calculations.