

## REVENUE ESTIMATING CONFERENCE

**TAX:** Sales & Use Tax, Corporate Income Tax, and Fees

**ISSUE:** Encouraging Plug-in Electric Vehicles

**BILL NUMBER(S):** SB1610

**SPONSOR(S):** Senator Altman

**MONTH/YEAR COLLECTION IMPACT BEGINS:** July 1, 2009

**DATE OF ANALYSIS:** March 5, 2009

### SECTION 1: NARRATIVE

#### a. Current Law:

Currently there are no special provisions for plug-in electric vehicles.

#### b. Proposed Change:

This appears to be a new section. It is unclear where this section goes.

There are a few provisions:

1. Sales tax exemption on all plug-in vehicles sold. A sales tax exemption on specified components for converting existing vehicles to plug-in, including electric motors, electric motor controllers, battery chargers, batteries, and after-market converter kits. Sales tax exemption extends to county surtaxes.
2. Corporate income tax credits \$1,000 per year per vehicle for fleets of 10 or more electric plug-in vehicles (registered and tagged in Florida).
3. Exemption from paying tolls on roads in the SunPass system from July 1, 2009 to December 31, 2019.
4. A one-time \$2,000 rebate for installing a public charging station (capped at \$200,000 per year).
5. A one-time \$2,000 rebate for a conversion kit (capped at \$200,000 per year).

### SECTION 2: DESCRIPTION OF DATA AND SOURCES

New Kits Turn any Car into a Plug-In Hybrid

[http://www.myride.com/technology/new\\_kits\\_turn\\_any\\_car\\_into\\_a\\_plug\\_in\\_hybrid-3989-page1.html](http://www.myride.com/technology/new_kits_turn_any_car_into_a_plug_in_hybrid-3989-page1.html)

Sun Pass Calculator <http://www.sunpass.com/tollcalculator.cfm?From=savings>

Couloub Technologies charge point stations for plug ins. Company representative estimated the cost at about \$5,000 for the initial station and about \$2,000 for subsequent stations. Currently there is a 50% Federal tax incentive. This model is a vending machine style. <http://www.coulombtech.com/sales.php>

(Sec. 1623) of H.R. 1: Increases in 2009 and 2010 the tax credit for residential and commercial alternative fuel vehicle refueling property expenditures.

Estimates of Hybrid Adoption in Florida:

[http://www.isecorp.com/ise\\_news/ise\\_press\\_articles/pdf/usatoday-news.pdf](http://www.isecorp.com/ise_news/ise_press_articles/pdf/usatoday-news.pdf)

<http://www.hybridcars.com/market-dashboard/april-2008-hybrids-defy-recession.html>

### SECTION 3: METHODOLOGY (INCLUDE ASSUMPTIONS AND ATTACH DETAILS)

Adoption rate of electric plug-in vehicles was based on adoption rate on hybrid vehicles in Florida from 2000. Payoff periods are estimated to determine reasonableness of adoption. It is assumed that half of the vehicles would be part of corporate fleets, and half are individual sales. Corporate Income Tax credit is calculated to be for next fiscal year. 10KwH converter is assumed to cost 50% more than the 5 KwH converter. High toll use is estimate to be equivalent to be 2 tolls at \$2 per toll per day. Low toll use is assumed to be 1 toll at \$1.50 per day.

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**SECTION 4: PROPOSED FISCAL IMPACT**

State Impact: All Funds	FY 2009-10 Annualized	FY 209-10 Cash	FY 2010-11 Cash	FY 2011-12 Cash	FY 2012-13 Cash
High					
Middle	(\$2.3 Million)	(\$.9 Million)	(\$2.3 Million)	(\$5.0 Million)	(\$8.6 Million)
Low					

**SECTION 5: CONSENSUS ESTIMATE (ADOPTED 3/20/09)** The conference adopted the proposed estimates.

	FY 2009-10 Annualized	FY 2009-10 Cash	FY 2010-11 Cash	FY 2011-12 Cash	FY 2012-13 Cash
General Revenue—Sales Tax	(1.1)	(.5)	(1.1)	(2.0)	(2.7)
General Revenue--Corporate	(.2)	0	(.2)	(.6)	(1.4)
State Trust—Sales Tax	(Insignificant)	(Insignificant)	(Insignificant)	(Insignificant)	(Insignificant)
State Trust--Tolls	(.5)	(.1)	(.5)	(1.1)	(2.1)
Total State Impact	(1.8)	(.6)	(1.8)	(3.7)	(6.2)
Revenue Sharing	(Insignificant)	(Insignificant)	(Insignificant)	(.1)	(.1)
Local Gov't Half Cent	(.1)	(.1)	(.1)	(.2)	(.3)
Local Option	(.1)	(.1)	(.1)	(.2)	(.3)
Local Tolls	(.4)	(.1)	(.4)	(1.0)	(2.1)
Total Local Impact	(.6)	(.3)	(.6)	(1.5)	(2.8)
Total Impact	(2.4)	(.9)	(2.4)	(5.2)	(9.0)

	A	B	C	D	E	F
1						
2		<b>Overall Impact by Tax</b>				
3						
4						
5			<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
6		Sales Tax Exemptions	\$341,836	\$999,168	\$1,873,440	\$2,497,920
7		Corporate Income Tax Credits	\$0	\$200,000	\$600,000	\$1,350,000
8		Vehicle License Taxes	\$9,000	\$27,000	\$60,750	\$105,750
9		Total Tax Impact	<b>\$350,836</b>	<b>\$1,226,168</b>	<b>\$2,534,190</b>	<b>\$3,953,670</b>
10						
11						
12		<b>The bill also contains the following appropriations:</b>				
13		Rebate on Installing Public Charging Stations	\$50,000	\$100,000	\$150,000	\$200,000
14		Rebate for Converter Kits	\$200,000	\$200,000	\$200,000	\$200,000

	A	B	C	D	E
1					
2		<b>Costs and Savings</b>			
3					
4	Initial Costs		5KwH	New Plug -in Vehicle	New Hybrid with Converter (Small Battery)
5		After Market Converter Kit	\$9,995		\$9,995
6		Plug-in Vehicle		\$35,000	
7		Hybrid Vehicle			\$22,000
8		Intallation Fee	\$400		\$400
9		<b>Total</b>	<b>\$10,395</b>	<b>\$35,000</b>	<b>\$32,395</b>
10	Savings				
11		<b>Initial</b>			
12		Sales Tax Exemption	\$623.70	\$2,100.00	\$1,943.70
13		Converter Rebate	\$2,000		\$2,000
14		<b>Annual</b>			
15		Motor Vehicle License Tax Exemption	\$22.50	\$22.50	\$22.50
16		Corporate Fleet Credit	\$1,000	\$1,000	\$1,000
17		Fuel Cost Savings			
18		8 cents per mile, 40 miles a day, 365 days	\$1,168	\$1,168	\$1,168
19					
20					
21					
22					
23					

US\$40K<sup>[46]</sup><sup>[47]</sup> with government approved subsidies bringing the price to around \$32.5K. Initially, the GM vice president wanted it at about US\$30K.<sup>[48]</sup>

	A	B	C	D	E
1					
2		<b>Estimated Payoff Period</b>			
3					
4		<b>Corporate Fleet</b>	<b>Initial Costs''</b>	<b>Annual Savings</b>	<b>Years Payoff</b>
5		Using Converter Kit on Existing Vehicle	\$8,395	\$2,191	3.8
6		Purchase New Plug-In Vehicle	\$20,000	\$2,191	9.1
7		Purchased New Hybrid with a Converter Kit	\$15,395	\$2,191	7.0
8					
9		<b>Individual</b>	<b>Initial Costs''</b>	<b>Annual Savings</b>	<b>Years Payoff</b>
10		Using Converter Kit on Existing Vehicle	\$8,395	\$1,191	7.1
11		Purchase New Plug-In Vehicle	\$20,000	\$1,191	16.8
12		Purchased New Hybrid with a Converter Kit	\$15,395	\$1,191	12.9
13					
14					
15		*Initial costs that includes purchasing a new vehicle is reduced by \$15,000. This reduction is based on purchasing a comparable vehicle (e.g. Honda Civic) instead of electric plug-in.			

	A	B	C	D	E	F
1						
2						
3						
4	<b>Sample SunPass Tolls</b>					
5				<b>Miles</b>	<b>Toll</b>	
6	SC 55 & US 98 to SC 19 & SR 54,			36.31	\$3.00	
7	Alligator Alley,			77.71	\$2.00	
8	SEM 55 & I 4 to SEM 38 & Aloma,			16.95	\$1.50	
9	H 47 & NW 27th Ave (University to H1 & US 1 (South Dixie)			46.1	\$2.50	
10	Boyton Beach Blvd to Dolphin Stadium,			40.66	\$1.75	
11	Turnpike I-75 to SR 80			211.05	\$11.80	
12	Coconut Creek to Sunrise Blvd			8.32	\$0.75	
13	Sunshine Skyway Bridge				\$0.75	
14	Old Tampa Highway to Highlands Road			8.34	\$1.00	
15						
16						
17						
18						
19	<b>SunPass Fee</b>					
20			<b>Total Number</b>		<b>Price Per Toll</b>	
21			<b>of Toll Trips</b>	<b>2.00</b>	<b>1.50</b>	<b>1.00</b>
22			<b>per Year</b>			
23						
24	High (Average 4 per day)	1460		\$2,920	\$2,190	\$1,460
25	Medium (Average 2 per day)	730		<b>\$1,460</b>	\$1,095	\$730
26	Low (Average 1 per day)	365		\$730	<b>\$548</b>	\$365
27						
28						
29						
30	<b>Estimates Used</b>					
31	High SunPass	\$1,460				
32	Low SunPass	\$548				

	A	B	C	D	E	F	G	H
1	<b>Estimated Adoption of New Vehicle Technologies in Florida</b>							
2								
3								
4	<b>Year</b>	<b>Number of Hybrids (US)</b>	<b>Number of Hybrids (FL)</b>	<b>Estimated Number of Hybrids in FL</b>		<b>SFY</b>	<b>Estimated Number of Plug-In Electric Cars in FL</b>	
5								
6	2008	400,000		15,740				
7	2007	360,000	16,518	14,166				
8	2006	250,000		9,837				
9	2005	210,000		8,263	2014-15		8,500	
10	2004	83,153	3,272	3,272	2013-14		3,500	
11	2003	50,000		1,967	2012-13		2,000	
12	2002	38,000		1,495	2011-12		1,500	
13	2001	20,000		787	2010-11		800	
14	2000	10,000		393	2009-10		400	

	A	B	C	D	E	F	G	H	I
1									
2		<b>Estimated Number of Vehicles</b>							
3		<b>Corporate Fleet</b>		<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>		
4		Using Converter Kit on Existing Vehicle	25%	100	200	375	500		
5		Purchase New Plug-In Vehicle	10%	40	80	150	200		
6		Purchased New Hybrid with a Converter Kit	15%	60	120	225	300		
7									
8		<b>Individual</b>							
9		Using Converter Kit on Existing Vehicle	30%	120	240	450	600		
10		Purchase New Plug-In Vehicle	10%	40	80	150	200		
11		Purchased New Hybrid with a Converter Kit	10%	40	80	150	200		
12									
13		<b>Total</b>	100%	<b>400</b>	<b>800</b>	<b>1,500</b>	<b>2,000</b>		
14									
15									
16		<b>Tax Impact per Vehicle</b>							
17									
18				<b>Initial</b>			<b>Annual</b>		
19		<b>Corporate Fleet</b>	<b>Rebate on</b>	<b>6% Sales</b>	<b>Total Initial</b>		<b>License</b>	<b>Corporate</b>	<b>Total Initial</b>
20		Using Converter Kit on Existing Vehicle	<b>Converter Kit</b>	<b>Tax</b>			<b>Tax</b>	<b>Fleet</b>	
21		Purchase New Plug-In Vehicle	\$2,000.00	\$623.70	\$2,623.70		\$22.50	\$1,000.00	\$1,022.50
22		Purchased New Hybrid with a Converter Kit	\$0.00	\$2,100.00	\$2,100.00		\$22.50	\$1,000.00	\$1,022.50
23			\$2,000.00	\$1,943.70	\$3,943.70		\$22.50	\$1,000.00	\$1,022.50
24		<b>Individual</b>							
25		Using Converter Kit on Existing Vehicle	\$2,000.00	\$623.70	\$2,623.70		\$22.50	\$0.00	\$22.50
26		Purchase New Plug-In Vehicle	\$0.00	\$2,100.00	\$2,100.00		\$22.50	\$0.00	\$22.50
27		Purchased New Hybrid with a Converter Kit	\$2,000.00	\$1,943.70	\$3,943.70		\$22.50	\$0.00	\$22.50



	A	B	C	D	E	F	G	H	I	J
1	<b>Tax Impact</b>									
2										
3			<b>Vehicles</b>	<b>Initial</b>			<b>Annual Tax Impacts</b>			
4										
5	<b>SFY 2009-2010</b>					<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	
6	<b>Corporate Fleet</b>									
7		Using Converter Kit on Existing Vehicle	100	\$262,370		\$2,250				
8		Purchase New Plug-In Vehicle	40	\$84,000		\$900				
9		Purchased New Hybrid with a Converter Kit	60	\$236,622		\$1,350				
10	<b>Individual</b>									
11		Using Converter Kit on Existing Vehicle	120	\$314,844		\$2,700				
12		Purchase New Plug-In Vehicle	40	\$84,000		\$900				
13		Purchased New Hybrid with a Converter Kit	40	\$157,748		\$900				
14	<b>Total</b>									
15		Conversion Kits (Rebate Limited to 100 Units)		320						
16		Excess Rebate		\$440,000						
17		Public Charging Station (Rebate Limited to 100 Units)		100						
18		<b>Total Impact</b>		<b>\$750,836</b>						
19										
20	<b>SFY 2010-2011</b>									
21	<b>Corporate Fleet</b>									
22		Using Converter Kit on Existing Vehicle	200	\$524,740		\$102,250	\$4,500			
23		Purchase New Plug-In Vehicle	80	\$168,000		\$40,900	\$1,800			
24		Purchased New Hybrid with a Converter Kit	120	\$473,244		\$61,350	\$2,700			
25	<b>Individual</b>									
26		Using Converter Kit on Existing Vehicle	240	\$629,688		\$2,700	\$5,400			
27		Purchase New Plug-In Vehicle	80	\$168,000		\$900	\$1,800			
28		Purchased New Hybrid with a Converter Kit	80	\$315,496		\$900	\$1,800			
29	<b>Total</b>									
30		Conversion Kits (Rebate Limited to 100 Units)		640						
31		Excess Rebate		\$1,080,000						
32		Public Charging Station (Rebate Limited to 100 Units)		100						
33		<b>Total Impact</b>		<b>\$1,626,168</b>						
34										
35	<b>SFY 2011-2012</b>									
36	<b>Corporate Fleet</b>									
37		Using Converter Kit on Existing Vehicle	375	\$983,888		\$102,250	\$204,500	\$8,438		
38		Purchase New Plug-In Vehicle	150	\$315,000		\$40,900	\$81,800	\$3,375		
39		Purchased New Hybrid with a Converter Kit	225	\$887,333		\$61,350	\$122,700	\$5,063		
40	<b>Individual</b>									
41		Using Converter Kit on Existing Vehicle	450	\$1,180,665		\$2,700	\$5,400	\$10,125		
42		Purchase New Plug-In Vehicle	150	\$315,000		\$900	\$1,800	\$3,375		
43		Purchased New Hybrid with a Converter Kit	150	\$591,555		\$900	\$1,800	\$3,375		
44	<b>Total</b>									
45		Conversion Kits (Rebate Limited to 100 Units)	1,500	\$4,273,440		\$209,000	\$418,000	\$33,750		
46		Excess Rebate		1,200						
47		Public Charging Station (Rebate Limited to 100 Units)		\$2,200,000						
48		<b>Total Impact</b>		<b>\$2,934,190</b>						
49										
50	<b>SFY 2012-2013</b>									
51	<b>Corporate Fleet</b>									
52		Using Converter Kit on Existing Vehicle	500	\$1,311,850		\$102,250	\$204,500	\$383,438	\$11,250	
53		Purchase New Plug-In Vehicle	200	\$420,000		\$40,900	\$81,800	\$153,375	\$4,500	
54		Purchased New Hybrid with a Converter Kit	300	\$1,183,110		\$61,350	\$122,700	\$230,063	\$6,750	
55	<b>Individual</b>									
56		Using Converter Kit on Existing Vehicle	600	\$1,574,220		\$2,700	\$5,400	\$10,125	\$13,500	
57		Purchase New Plug-In Vehicle	200	\$420,000		\$900	\$1,800	\$3,375	\$4,500	
58		Purchased New Hybrid with a Converter Kit	200	\$788,740		\$900	\$1,800	\$3,375	\$4,500	
59	<b>Total</b>									
60		Conversion Kits (Rebate Limited to 100 Units)	2,000	\$5,697,920		\$209,000	\$418,000	\$783,750	\$45,000	
61		Excess Rebate		1,600						
62		Public Charging Station (Rebate Limited to 100 Units)		\$3,000,000						
63		<b>Total Impact</b>		<b>\$4,353,670</b>						