

## **APPENDIX B**

### **➤ Scenario Results**

## Base Case

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Environmental Effectiveness</b>																
Avg. fuel economy of new vehicles	9.0	8.8	8.6	8.5	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.2771
Change in overall GHG emissions (MT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in overall fuel use (million litres of gasoline)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Fiscal Impact</b>																
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Economic Efficiency</b>																
Change in Consumer Surplus (\$millions)	\$0.00	\$91.85	\$176.77	\$208.99	\$291.75	\$320.90	\$320.90	\$320.90	\$320.90	\$320.90	\$321.02	\$321.02	\$321.02	\$321.02	\$321.02	\$321.02
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Overall societal costs	\$0	\$92	\$177	\$209	\$292	\$321	\$321	\$321	\$321	\$321	\$321	\$321	\$321	\$321	\$321	\$321
Cost per tonne of GHG reduction																
<b>Fairness</b>																
Change in Total Sales (numbers of vehicles)	0	1,971	3,788	4,476	6,241	6,862	6,862	6,862	6,862	6,862	6,865	6,865	6,865	6,865	6,865	6,865
Change in Revenue (\$ billions)	\$0.00	\$0.14	\$0.25	\$0.30	\$0.36	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44
Big Three	\$0.00	\$0.16	\$0.25	\$0.23	\$0.32	\$0.37	\$0.37	\$0.37	\$0.37	\$0.37	\$0.37	\$0.37	\$0.37	\$0.37	\$0.37	\$0.37
Others	\$0.00	-\$0.02	\$0.00	\$0.06	\$0.04	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07
Total Market Share																
Big Three	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62.4%
Others	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%
Total Market Share																
Cars	57%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%
Trucks	43%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%
Average price of new vehicles	\$27,929	\$27,967	\$28,029	\$28,045	\$28,054	\$28,093	\$28,093	\$28,093	\$28,093	\$28,093	\$28,094	\$28,094	\$28,094	\$28,094	\$28,094	\$28,094

**Scenario 2**

**\$250 Feebate, One Pivot Point, Revenue Neutral**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total	
<b>Environmental Effectiveness</b>																		
Avg. fuel economy of new vehicles	9.0	8.6	8.4	8.4	8.2	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.0857	
Change in overall GHG emissions (MT)	(0.04)	(0.07)	(0.35)	(0.38)	(0.56)	(0.56)	(0.60)	(0.69)	(0.88)	(1.01)	(1.07)	(1.20)	(1.31)	(1.39)	(1.42)	(1.49)	(13.02)	
Change in overall fuel use (million litres of gasoline)	0	(56)	(112)	(157)	(193)	(224)	(263)	(310)	(359)	(409)	(450)	(489)	(524)	(554)	(583)	(607)		
<b>Fiscal Impact</b>																		
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Change in fuel tax revenue to government (\$millions)	\$0	-\$20	-\$39	-\$55	-\$68	-\$79	-\$92	-\$109	-\$126	-\$144	-\$158	-\$172	-\$184	-\$194	-\$205	-\$213		
<b>Economic Efficiency</b>																		
Change in Consumer Surplus (\$millions)	\$0.00	\$73.12	\$157.54	\$189.91	\$272.76	\$303.09	\$307.29	\$308.92	\$311.93	\$313.02	\$314.11	\$314.11	\$314.11	\$314.11	\$314.11	\$314.11	\$1,904	
Incr. Change in Consumer Surplus (\$millions)	\$0.00	-\$18.73	-\$19.23	-\$19.07	-\$19.00	-\$17.81	-\$13.61	-\$11.98	-\$8.97	-\$7.88	-\$6.91	-\$6.91	-\$6.91	-\$6.91	-\$6.91	-\$6.91	-\$105	
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$17	\$34	\$47	\$58	\$68	\$79	\$93	\$108	\$123	\$136	\$148	\$158	\$167	\$176	\$183	\$649	
Overall societal costs	\$0	-\$2	\$14	\$28	\$39	\$50	\$66	\$82	\$99	\$115	\$129	\$141	\$151	\$160	\$169	\$176	\$544	
Cost per tonne of GHG reduction (Discounted to 2003)																	-\$42	
<b>Fairness</b>																		
Change Total Sales (numbers of vehicles)	0	1,569	3,377	4,069	5,837	6,483	6,572	6,607	6,671	6,694	6,718	6,718	6,718	6,718	6,718	6,718		
Incr. Change in Sales	0	-401	-411	-407	-405	-379	-290	-255	-191	-168	-147	-147	-147	-147	-147	-147		
Change in Revenue (\$ billions)	\$0.00	-\$0.51	-\$0.40	-\$0.35	-\$0.33	-\$0.23	-\$0.21	-\$0.19	-\$0.20	-\$0.19	-\$0.19	-\$0.19	-\$0.19	-\$0.19	-\$0.19	-\$0.19		
Big Three	\$0.00	-\$0.67	-\$0.57	-\$0.61	-\$0.52	-\$0.47	-\$0.45	-\$0.43	-\$0.43	-\$0.43	-\$0.42	-\$0.42	-\$0.42	-\$0.42	-\$0.42	-\$0.42		
Others	\$0.00	\$0.16	\$0.17	\$0.25	\$0.19	\$0.24	\$0.23	\$0.23	\$0.24	\$0.24	\$0.24	\$0.24	\$0.24	\$0.24	\$0.24	\$0.24		
Total Market Share																		
Big Three	62%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61.2%		
Others	38%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%		
Total Market Share																		
Cars	57%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%		
Trucks	43%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%		
Average price of new vehicles	\$27,929	\$27,554	\$27,596	\$27,614	\$27,598	\$27,651	\$27,663	\$27,674	\$27,672	\$27,674	\$27,678	\$27,678	\$27,678	\$27,678	\$27,678	\$27,678		
<b>Transfers</b>																		
Rebates (millions)	-	- 299.09	- 292.47	- 290.26	- 294.18	- 284.70	- 286.70	- 288.23	- 290.34	- 289.81	- 289.26	- 289.26	- 289.26	- 289.26	- 289.26	- 289.26	- 289.26	
Fees (millions)	-	299.09	292.47	290.26	294.19	284.70	286.69	288.22	290.33	289.81	289.26	289.26	289.26	289.26	289.26	289.26	289.26	

### Scenario 3

#### 500 Feebate, One Pivot Point, Revenue Neutral

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Total	
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.5	8.3	8.3	8.1	8.1	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8972	
cars	7.6	7.3	7.2	7.1	7.0	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8051	
Trucks	10.7	10.3	10.0	9.9	9.8	9.7	9.6	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4876	
Change in overall GHG emissions (MT)	(0.0)	(0.2)	(0.6)	(0.8)	(1.0)	(1.1)	(1.3)	(1.5)	(1.8)	(2.0)	(2.2)	(2.4)	(2.6)	(2.8)	(2.9)	(3.0077)	
Change in overall fuel use (million litres of gasoline)	0.0	(111.4)	(223.5)	(314.9)	(387.5)	(450.5)	(529.3)	(623.6)	(724.6)	(825.3)	(908.9)	(988.0)	(1,058.5)	(1,119.2)	(1,179.1)	(1,227.9765)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Change in fuel tax revenue to government (\$millions)	\$0	-\$39	-\$78	-\$111	-\$136	-\$158	-\$186	-\$219	-\$254	-\$290	-\$319	-\$347	-\$372	-\$393	-\$414	-\$431	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	\$18.36	\$101.57	\$134.60	\$217.66	\$251.23	\$255.10	\$255.32	\$258.02	\$260.23	\$262.40	\$262.40	\$262.40	\$262.40	\$262.40	\$262.40	\$1,497
Incr. Change in Consumer Surplus (\$millions)	\$0.00	-\$73.48	-\$75.20	-\$74.38	-\$74.10	-\$69.67	-\$65.80	-\$65.58	-\$62.88	-\$60.66	-\$58.62	-\$58.62	-\$58.62	-\$58.62	-\$58.62	-\$58.62	-\$513
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$34	\$67	\$95	\$117	\$136	\$160	\$188	\$218	\$249	\$274	\$298	\$319	\$337	\$356	\$370	\$1,307
Overall societal costs	\$0	-\$40	-\$8	\$21	\$43	\$66	\$94	\$122	\$156	\$188	\$215	\$239	\$261	\$279	\$297	\$312	\$795
Cost per tonne of GHG reduction (Discounted to 2003))																	-\$30
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	394	2,179	2,886	4,661	5,378	5,460	5,465	5,522	5,570	5,616	5,616	5,616	5,616	5,616	5,616	
Incr. Change in Sales	0	-1,576	-1,609	-1,590	-1,580	-1,484	-1,402	-1,397	-1,340	-1,292	-1,249	-1,249	-1,249	-1,249	-1,249	-1,249	
Change in Revenue (\$ billions)	\$0.00	-\$1.16	-\$1.05	-\$1.00	-\$1.01	-\$0.89	-\$0.86	-\$0.82	-\$0.84	-\$0.83	-\$0.82	-\$0.82	-\$0.82	-\$0.82	-\$0.82	-\$0.82	
Big Three	\$0.00	-\$1.50	-\$1.39	-\$1.44	-\$1.36	-\$1.30	-\$1.25	-\$1.21	-\$1.24	-\$1.22	-\$1.21	-\$1.21	-\$1.21	-\$1.21	-\$1.21	-\$1.21	
Others	\$0.00	\$0.34	\$0.34	\$0.45	\$0.35	\$0.41	\$0.40	\$0.39	\$0.40	\$0.39	\$0.40	\$0.40	\$0.40	\$0.40	\$0.40	\$0.40	
Total Market Share																	
Big Three	62%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60.0%	
Others	38%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	
Total Market Share																	
Cars	57%	60%	60%	60%	60%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	
Trucks	43%	40%	40%	40%	40%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	
Average price of new vehicles	\$27,929	\$27,138	\$27,181	\$27,202	\$27,160	\$27,227	\$27,251	\$27,275	\$27,261	\$27,267	\$27,274	\$27,274	\$27,274	\$27,274	\$27,274	\$27,274	
cars	24522.29	23753.34	23784.39	23815.59	23698.18	23737.3	23762.14	23772.97	23756.41	23756.79	23761.1	23761.1	23761.103	23761.103	23761.103	23761.103	
Trucks	32358.49	32179.49	32171.14	32176.78	32254.08	32313.29	32339.86	32370.35	32373.49	32381.83	32389.38	32389.38	32389.3843	32389.3843	32389.3843	32389.38433	
<b>Transfers</b>																	
Rebates (millions)	-	587.28	570.37	564.37	573.79	556.56	565.01	570.47	579.65	577.93	576.16	576.16	576.16	576.16	576.16	576.16	576.16
Fees (millions)	-	587.28	570.38	564.37	573.79	556.56	565.00	570.47	579.66	577.94	576.16	576.16	576.16	576.16	576.16	576.16	576.16

## Scenario 4

### \$1000 Feebate, One Pivot Point, Revenue Neutral

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.3	8.1	8.0	7.9	7.8	7.7	7.6	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5269	
Change in overall GHG emissions (MT)	(0.04)	(0.48)	(1.18)	(1.54)	(1.99)	(2.22)	(2.57)	(3.02)	(3.59)	(4.11)	(4.49)	(4.92)	(5.31)	(5.63)	(5.88)	(6.15)	(53.12)
Change in overall fuel use (million litres of gasoline)	0	(224)	(449)	(632)	(778)	(905)	(1,069)	(1,260)	(1,471)	(1,679)	(1,852)	(2,014)	(2,161)	(2,287)	(2,411)	(2,512)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Change in fuel tax revenue to government (\$millions)	\$0	-\$79	-\$158	-\$222	-\$273	-\$318	-\$375	-\$442	-\$516	-\$589	-\$650	-\$707	-\$758	-\$803	-\$846	-\$882	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	-\$190.45	-\$110.19	-\$73.45	\$10.38	\$54.70	\$38.57	\$28.82	\$14.72	\$19.90	\$25.10	\$25.10	\$25.10	\$25.10	\$25.10	\$25.10	-\$180.09
Incr. Change in Consumer Surplus (\$millions)	\$0.00	-\$282.30	-\$286.95	-\$282.44	-\$281.38	-\$266.19	-\$282.32	-\$292.08	-\$306.18	-\$300.99	-\$295.91	-\$295.91	-\$295.91	-\$295.91	-\$295.91	-\$295.91	-\$2,189.76
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$67	\$136	\$191	\$234	\$273	\$322	\$380	\$443	\$506	\$558	\$607	\$652	\$690	\$727	\$757	\$2,652.57
Overall societal costs	\$0	-\$215	-\$152	-\$92	-\$47	\$7	\$40	\$88	\$137	\$205	\$262	\$311	\$356	\$394	\$431	\$462	\$462.82
Cost per tonne of GHG reduction (discounted to 2003)																	-\$9
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	-4,103	-2,371	-1,580	223	1,174	828	619	316	427	539	539	539	539	539	539	
Incr. Change in Total Sales	0	-6,073	-6,159	-6,056	-6,019	-5,688	-6,034	-6,243	-6,546	-6,435	-6,325	-6,325	-6,325	-6,325	-6,325	-6,325	
Change in Revenue (\$ billions)	\$0.00	-\$2.44	-\$2.33	-\$2.26	-\$2.35	-\$2.20	-\$2.13	-\$2.05	-\$2.15	-\$2.12	-\$2.10	-\$2.10	-\$2.10	-\$2.10	-\$2.10	-\$2.10	
Big Three	\$0.00	-\$3.15	-\$3.02	-\$3.09	-\$3.02	-\$2.96	-\$2.84	-\$2.73	-\$2.83	-\$2.81	-\$2.80	-\$2.80	-\$2.80	-\$2.80	-\$2.80	-\$2.80	
Others	\$0.00	\$0.71	\$0.70	\$0.83	\$0.67	\$0.76	\$0.71	\$0.68	\$0.69	\$0.68	\$0.70	\$0.70	\$0.70	\$0.70	\$0.70	\$0.70	
Total Market Share																	
Big Three	62%	57%	57%	57%	57%	57%	58%	58%	58%	58%	58%	58%	58%	58%	58%	57.6%	
Others	38%	43%	43%	43%	43%	43%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	
Total Market Share																	
Cars	57%	63%	63%	63%	63%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	
Trucks	43%	37%	37%	37%	37%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	
Average price of new vehicles	\$27,929	\$26,352	\$26,399	\$26,429	\$26,336	\$26,423	\$26,477	\$26,534	\$26,472	\$26,486	\$26,501	\$26,501	\$26,501	\$26,501	\$26,501	\$26,501	
<b>Transfers</b>																	
Rebates (millions)	0	-1128.561	-1082.628	-1063.481	-1093.836	-1069.127	-1113.216	-1114.561	-1153.438	-1148.862	-1143.236	-1143.236	-1143.236	-1143.236	-1143.236	-1143.236	
Fees (millions)	0	1128.5934	1082.6037	1063.4686	1093.8205	1069.0983	1113.1891	1114.5472	1153.3665	1148.7938	1143.1829	1143.1829	1143.1829	1143.1829	1143.1829	1143.1829	

## Scenario 5

### North American 500 Feebate, One Pivot Point, Revenue Neutral

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.5	8.3	8.3	8.1	8.1	7.8	7.7	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7,3996
Change in overall GHG emissions (MT)	(0.04)	(0.20)	(0.63)	(0.76)	(1.04)	(1.11)	(1.41)	(1.87)	(2.51)	(3.13)	(3.65)	(4.22)	(4.73)	(5.18)	(5.56)	(5.95)	(41.99)
Change in overall fuel use (million litres of gasoline)	0	(111)	(223)	(315)	(387)	(450)	(594)	(792)	(1,029)	(1,275)	(1,507)	(1,724)	(1,923)	(2,104)	(2,280)	(2,433)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	-\$39	-\$78	-\$111	-\$136	-\$158	-\$208	-\$278	-\$361	-\$447	-\$529	-\$605	-\$675	-\$739	-\$800	-\$854	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	\$18.36	\$101.57	\$134.60	\$217.66	\$251.23	\$241.36	\$237.56	\$229.89	\$235.10	\$239.78	\$239.78	\$239.78	\$239.78	\$239.78	\$239.78	\$1,414
Incr. Change in Consumer Surplus (\$millions)	\$0.00	-\$73.48	-\$75.20	-\$74.38	-\$74.10	-\$69.67	-\$79.54	-\$83.34	-\$91.01	-\$85.80	-\$81.23	-\$81.23	-\$81.23	-\$81.23	-\$81.23	-\$81.23	-\$595
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$34	\$67	\$95	\$117	\$136	\$179	\$239	\$310	\$384	\$454	\$520	\$580	\$634	\$687	\$734	\$1,936
Overall societal costs	\$0	-\$40	-\$8	\$21	\$43	\$66	\$99	\$156	\$219	\$299	\$373	\$439	\$499	\$553	\$606	\$652	\$1,340
Cost per tonne of GHG reduction (discounted to 2003)																	-\$32
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	394	2,179	2,886	4,661	5,378	5,167	5,086	4,922	5,034	5,133	5,133	5,133	5,133	5,133	5,133	5,133
Incr. Change in sales	0	-1,576	-1,609	-1,590	-1,580	-1,484	-1,695	-1,776	-1,940	-1,829	-1,731	-1,731	-1,731	-1,731	-1,731	-1,731	-1,731
Change in Revenue (\$ billions)	\$0.00	-\$1.16	-\$1.05	-\$1.00	-\$1.01	-\$0.89	-\$0.69	-\$0.52	-\$0.49	-\$0.39	-\$0.29	-\$0.29	-\$0.29	-\$0.29	-\$0.29	-\$0.29	-\$0.29
Big Three	\$0.00	-\$1.50	-\$1.39	-\$1.44	-\$1.36	-\$1.30	-\$1.14	-\$1.01	-\$1.07	-\$0.93	-\$0.87	-\$0.87	-\$0.87	-\$0.87	-\$0.87	-\$0.87	-\$0.87
Others	\$0.00	\$0.34	\$0.34	\$0.45	\$0.35	\$0.41	\$0.45	\$0.49	\$0.58	\$0.55	\$0.59	\$0.59	\$0.59	\$0.59	\$0.59	\$0.59	\$0.59
Total Market Share																	
Big Three	62%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60.1%
Others	38%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
Total Market Share																	
Cars	57%	60%	60%	60%	60%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%
Trucks	43%	40%	40%	40%	40%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%
Average price of new vehicles	\$27,929	\$27,138	\$27,181	\$27,202	\$27,160	\$27,227	\$27,366	\$27,485	\$27,509	\$27,575	\$27,639	\$27,639	\$27,639	\$27,639	\$27,639	\$27,639	\$27,639
<b>Transfers</b>																	
Rebates (millions)	0	-587,276	-570,371	-564,368	-573,792	-556,556	-572,846	-561,685	-586,607	-566,399	-548,574	-548,574	-548,574	-548,574	-548,574	-548,574	-548,574
Fees (millions)	0	587,2753	570,3812	564,3654	573,7885	556,5568	572,8652	561,685	586,5997	566,3985	548,5824	548,5824	548,5824	548,5824	548,5824	548,5824	548,5824

## Scenario 6

### 500 Feebate, One Pivot Point, Revenue Neutral

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.5	8.3	8.3	8.1	8.1	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8972
cars	7.6	7.3	7.2	7.1	7.0	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8051
Trucks	10.7	10.3	10.0	9.9	9.8	9.7	9.6	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4876
Change in overall GHG emissions (MT)	(0.0)	(0.2)	(0.6)	(0.8)	(1.0)	(1.1)	(1.3)	(1.5)	(1.8)	(2.0)	(2.2)	(2.4)	(2.6)	(2.8)	(2.9)	(3.0077)	(26.17)
Change in overall fuel use (million litres of gasoline)	0.0	(111.4)	(223.5)	(314.9)	(387.5)	(450.5)	(529.3)	(623.6)	(724.6)	(825.3)	(908.9)	(988.0)	(1,058.5)	(1,119.2)	(1,179.1)	(1,227.9765)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	-\$39	-\$78	-\$111	-\$136	-\$158	-\$186	-\$219	-\$254	-\$290	-\$319	-\$347	-\$372	-\$393	-\$414	-\$431	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	\$18.36	\$101.57	\$134.60	\$217.66	\$251.23	\$255.10	\$255.32	\$258.02	\$260.23	\$262.40	\$262.40	\$262.40	\$262.40	\$262.40	\$262.40	\$1,497
Incr. Change in Consumer Surplus (\$millions)	\$0.00	-\$73.48	-\$75.20	-\$74.38	-\$74.10	-\$69.67	-\$65.80	-\$65.58	-\$62.88	-\$60.66	-\$58.62	-\$58.62	-\$58.62	-\$58.62	-\$58.62	-\$58.62	-\$513
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$34	\$67	\$95	\$117	\$136	\$160	\$188	\$218	\$249	\$274	\$298	\$319	\$337	\$356	\$370	\$1,307
Overall societal costs	\$0	-\$40	-\$8	\$21	\$43	\$66	\$94	\$122	\$156	\$188	\$215	\$239	\$261	\$279	\$297	\$312	\$795
Cost per tonne of GHG reduction (Discounted to 2003)																	-\$30
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	394	2,179	2,886	4,661	5,378	5,460	5,465	5,522	5,570	5,616	5,616	5,616	5,616	5,616	5,616	5,616
Incr. Change in Sales	0	-1,576	-1,609	-1,590	-1,580	-1,484	-1,402	-1,397	-1,340	-1,292	-1,249	-1,249	-1,249	-1,249	-1,249	-1,249	-1,249
Change in Revenue (\$ billions)	\$0.00	-\$1.16	-\$1.05	-\$1.00	-\$1.01	-\$0.89	-\$0.86	-\$0.82	-\$0.84	-\$0.83	-\$0.82	-\$0.82	-\$0.82	-\$0.82	-\$0.82	-\$0.82	-\$0.82
Big Three	\$0.00	-\$1.50	-\$1.39	-\$1.44	-\$1.36	-\$1.30	-\$1.25	-\$1.21	-\$1.24	-\$1.22	-\$1.21	-\$1.21	-\$1.21	-\$1.21	-\$1.21	-\$1.21	-\$1.21
Others	\$0.00	\$0.34	\$0.34	\$0.45	\$0.35	\$0.41	\$0.40	\$0.39	\$0.40	\$0.39	\$0.40	\$0.40	\$0.40	\$0.40	\$0.40	\$0.40	\$0.40
Total Market Share																	
Big Three	62%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60.0%
Others	38%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
Total Market Share																	
Cars	57%	60%	60%	60%	60%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%
Trucks	43%	40%	40%	40%	40%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%
Average price of new vehicles	\$27,929	\$27,138	\$27,181	\$27,202	\$27,160	\$27,227	\$27,251	\$27,275	\$27,261	\$27,267	\$27,274	\$27,274	\$27,274	\$27,274	\$27,274	\$27,274	\$27,274
cars	24522.29	23753.34	23784.39	23815.59	23698.18	23737.3	23762.14	23772.97	23756.41	23756.79	23761.1	23761.1	23761.103	23761.103	23761.103	23761.103	23761.103
Trucks	32358.49	32179.49	32171.14	32176.78	32254.08	32313.29	32339.86	32370.35	32373.49	32381.83	32389.38	32389.38	32389.3843	32389.3843	32389.3843	32389.38433	32389.38433
<b>Transfers</b>																	
Rebates (millions)	-	- 587.28	- 570.37	- 564.37	- 573.79	- 556.56	- 565.01	- 570.47	- 579.65	- 577.93	- 576.16	- 576.16	- 576.16	- 576.16	- 576.16	- 576.16	- 576.16
Fees (millions)	-	587.28	570.38	564.37	573.79	556.56	565.00	570.47	579.66	577.94	576.16	576.16	576.16	576.16	576.16	576.16	576.16

## Scenario 8

### FB \$500, 2 pivot points - cars and trucks, revenue Neutral

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.6	8.4	8.4	8.2	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.9799
Cars	7.6	7.3	7.2	7.1	7.0	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8051
Trucks	10.7	10.3	10.0	9.9	9.8	9.7	9.6	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4876
Change in overall GHG emissions (MT)	(0.04)	(0.05)	(0.35)	(0.38)	(0.58)	(0.59)	(0.66)	(0.81)	(1.06)	(1.26)	(1.38)	(1.57)	(1.73)	(1.87)	(1.94)	(2.05)	(16.32)
Change in overall fuel use (million litres of gasoline)	0	(52)	(109)	(158)	(200)	(235)	(289)	(358)	(434)	(511)	(577)	(641)	(697)	(747)	(797)	(838)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	-\$18	-\$38	-\$55	-\$70	-\$83	-\$102	-\$126	-\$152	-\$179	-\$203	-\$225	-\$245	-\$262	-\$280	-\$294	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	\$48.99	\$128.62	\$161.54	\$245.56	\$277.31	\$281.62	\$280.53	\$284.19	\$286.08	\$288.01	\$288.01	\$288.01	\$288.01	\$288.01	\$288.01	\$1,701
Incr. Change in Consumer Surplus (\$millions)	\$0.00	-\$42.86	-\$48.15	-\$47.45	-\$46.19	-\$43.59	-\$39.28	-\$40.36	-\$36.71	-\$34.82	-\$33.00	-\$33.00	-\$33.00	-\$33.00	-\$33.00	-\$33.00	-\$309
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$16	\$33	\$48	\$60	\$71	\$87	\$108	\$131	\$154	\$174	\$193	\$210	\$225	\$240	\$253	\$784
Overall societal costs	\$0	-\$27	-\$15	\$0	\$14	\$27	\$48	\$68	\$94	\$119	\$141	\$160	\$177	\$192	\$207	\$220	\$475
Cost per tonne of GHG reduction (discounted to 2003)																	-\$29
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	1,052	2,758	3,462	5,257	5,934	6,025	6,002	6,080	6,121	6,162	6,162	6,162	6,162	6,162	6,162	6,162
Incr. Change in sales	0	-919	-1,030	-1,014	-985	-928	-837	-860	-782	-742	-703	-703	-703	-703	-703	-703	-703
Change in Revenue (\$ billions)	\$0.00	-\$0.72	-\$0.64	-\$0.59	-\$0.59	-\$0.48	-\$0.44	-\$0.42	-\$0.43	-\$0.42	-\$0.41	-\$0.41	-\$0.41	-\$0.41	-\$0.41	-\$0.41	-\$0.41
Big Three	\$0.00	-\$0.86	-\$0.80	-\$0.85	-\$0.75	-\$0.72	-\$0.66	-\$0.63	-\$0.65	-\$0.64	-\$0.63	-\$0.63	-\$0.63	-\$0.63	-\$0.63	-\$0.63	-\$0.63
Others	\$0.00	\$0.14	\$0.16	\$0.26	\$0.16	\$0.23	\$0.22	\$0.22	\$0.22	\$0.22	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23
Total Market Share																	
Big Three	62%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	60.9%
Others	38%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%
Total Market Share																	
Cars	57%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%
Trucks	43%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%
Average price of new vehicles	\$27,929	\$27,423	\$27,447	\$27,466	\$27,435	\$27,493	\$27,519	\$27,537	\$27,528	\$27,533	\$27,539	\$27,539	\$27,539	\$27,539	\$27,539	\$27,539	\$27,539
Cars	24522.29	23753.91	23784.59	23816.07	23697.08	23737.07	23761.29	23771.43	23754.82	23755.22	23759.32	23759.32	23759.32	23759.32	23759.32	23759.32	23759.32
Trucks	32358.49	32179.55	32171.18	32176.72	32254.27	32313.32	32339.85	32370.25	32373.42	32381.91	32389.38	32389.38	32389.38	32389.38	32389.38	32389.38	32389.38
<b>Transfers</b>																	
Rebates (millions)	0	-418.135	-453.783	-442.791	-439.861	-428.853	-438.573	-445.888	-454.939	-454.062	-453.063	-453.063	-453.063	-453.063	-453.063	-453.063	-453.063
Fees (millions)	0	418.1379	453.7849	442.8006	439.8559	428.8598	438.5772	445.8731	454.9216	454.039	453.0265	453.0265	453.0265	453.0265	453.0265	453.0265	453.0265



## Scenario 9

### FB \$1000, 11 pivot points by Class, Revenue Neutral

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.7	8.5	8.4	8.2	8.2	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0330
Change in overall GHG emissions (MT)	(0.04)	(0.01)	(0.25)	(0.24)	(0.41)	(0.38)	(0.43)	(0.55)	(0.77)	(0.94)	(1.03)	(1.20)	(1.34)	(1.46)	(1.52)	(1.63)	(12.22)
Change in overall fuel use (million litres of gasoline)	0	(35)	(71)	(102)	(128)	(153)	(195)	(251)	(315)	(379)	(436)	(490)	(539)	(583)	(626)	(663)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	-\$12	-\$25	-\$36	-\$45	-\$54	-\$68	-\$88	-\$110	-\$133	-\$153	-\$172	-\$189	-\$205	-\$220	-\$233	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	\$62.91	\$145.97	\$177.70	\$261.89	\$291.82	\$296.75	\$296.59	\$300.49	\$302.40	\$304.10	\$304.10	\$304.10	\$304.10	\$304.10	\$304.10	\$1,821
Incr. Change in consumer Surplus (\$millions)	\$0.00	-\$28.93	-\$30.79	-\$31.29	-\$29.87	-\$29.08	-\$24.15	-\$24.30	-\$20.41	-\$18.50	-\$16.91	-\$16.91	-\$16.91	-\$16.91	-\$16.91	-\$16.91	-\$188
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$10	\$21	\$31	\$39	\$46	\$59	\$76	\$95	\$114	\$131	\$148	\$162	\$176	\$189	\$200	\$573
Overall societal costs	\$0	-\$19	-\$9	-\$1	\$9	\$17	\$35	\$51	\$74	\$96	\$114	\$131	\$146	\$159	\$172	\$183	\$384
Cost per tonne of GHG reduction (discounted to 2003)																	-\$31
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	1,350	3,129	3,808	5,605	6,243	6,348	6,345	6,428	6,468	6,504	6,504	6,504	6,504	6,504	6,504	6,504
Incr. Change in sales	0	-620	-658	-669	-637	-619	-514	-517	-435	-394	-360	-360	-360	-360	-360	-360	-360
Change in Revenue (\$ billions)	\$0.00	-\$0.53	-\$0.44	-\$0.40	-\$0.39	-\$0.30	-\$0.25	-\$0.23	-\$0.24	-\$0.23	-\$0.22	-\$0.22	-\$0.22	-\$0.22	-\$0.22	-\$0.22	-\$0.22
Big Three	\$0.00	-\$0.63	-\$0.57	-\$0.63	-\$0.49	-\$0.47	-\$0.41	-\$0.39	-\$0.40	-\$0.38	-\$0.38	-\$0.38	-\$0.38	-\$0.38	-\$0.38	-\$0.38	-\$0.38
Others	\$0.00	\$0.10	\$0.13	\$0.23	\$0.10	\$0.17	\$0.16	\$0.16	\$0.16	\$0.15	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16
Total Market Share																	
Big Three	62%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61.3%
Others	38%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%
Total Market Share																	
Cars	57%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%
Trucks	43%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%
Average price of new vehicles	\$27,929	\$27,548	\$27,575	\$27,585	\$27,558	\$27,609	\$27,639	\$27,656	\$27,649	\$27,654	\$27,660	\$27,660	\$27,660	\$27,660	\$27,660	\$27,660	\$27,660
<b>Transfers</b>																	
Rebates (millions)	0	-271,511	-282,904	-286,532	-276,69	-271,163	-272,891	-280,256	-285,319	-285,063	-285,012	-285,012	-285,012	-285,012	-285,012	-285,012	-285,012
Fees (millions)	0	272	283	287	277	271	273	280	285	285	285	285	285	285	285	285	285

## Scenario 10 Base Case

### FB 0, Full valuation fuel savings, revenue neutral

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Environmental Effectiveness</b>																
Avg. fuel economy of new vehicles	8.959	8.676	8.407	8.327	8.107	8.061	8.061	8.061	8.061	8.061	8.061	8.061	8.061	8.061	8.061	8.061
Change in overall GHG emissions (MT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in overall fuel use (million litres of gasoline)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Fiscal Impact</b>																
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Economic Efficiency</b>																
Change in Consumer Surplus (\$millions)	\$0.00	\$356.46	\$675.64	\$786.22	\$1,082.52	\$1,178.76	\$1,178.62	\$1,178.62	\$1,178.62	\$1,178.62	\$1,178.96	\$1,178.96	\$1,178.96	\$1,178.96	\$1,178.96	\$1,178.96
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Overall societal costs	\$0	\$356	\$676	\$786	\$1,083	\$1,179	\$1,179	\$1,179	\$1,179	\$1,179	\$1,179	\$1,179	\$1,179	\$1,179	\$1,179	\$1,179
Cost per tonne of GHG reduction																
<b>Fairness</b>																
Change Total Sales (numbers of vehicles)	0	7,619	14,375	16,702	22,902	24,904	24,901	24,901	24,901	24,901	24,909	24,909	24,909	24,909	24,909	24,909
Change in Revenue (\$ billions)	\$0.00	\$0.41	\$0.69	\$0.79	\$0.85	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
Big Three	\$0.00	\$0.57	\$0.81	\$0.73	\$0.92	\$1.04	\$1.04	\$1.04	\$1.04	\$1.04	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05
Others	\$0.00	-\$0.17	-\$0.12	\$0.06	-\$0.07	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
Total Market Share																
Big Three	62%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63.1%
Others	38%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%
Total Market Share																
Cars	57%	56%	56%	56%	56%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%
Trucks	43%	44%	44%	44%	44%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%
Average price of new vehicles	\$27,929	\$28,060	\$28,120	\$28,144	\$28,067	\$28,169	\$28,169	\$28,169	\$28,169	\$28,169	\$28,172	\$28,172	\$28,172	\$28,172	\$28,172	\$28,172
<b>Transfers</b>																
Rebates (millions)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fees (millions)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Scenario 10

### FB 500, Full valuation fuel savings, revenue neutral, 1pp

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.4	8.2	8.1	7.9	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.6895
Change in overall GHG emissions (MT)	-	(0.27)	(0.56)	(0.79)	(0.98)	(1.14)	(1.33)	(1.55)	(1.79)	(2.03)	(2.22)	(2.40)	(2.57)	(2.71)	(2.85)	(2.96)	(26.15)
Change in overall fuel use (million litres of gasoline)	-	(113)	(229)	(323)	(400)	(466)	(545)	(636)	(733)	(829)	(909)	(984)	(1,052)	(1,109)	(1,165)	(1,211)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	-\$39	-\$80	-\$113	-\$140	-\$164	-\$191	-\$223	-\$257	-\$291	-\$319	-\$345	-\$369	-\$389	-\$409	-\$425	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	\$280.85	\$596.06	\$707.98	\$1,004.10	\$1,105.21	\$1,139.26	\$1,156.00	\$1,177.56	\$1,186.55	\$1,195.86	\$1,195.86	\$1,195.86	\$1,195.86	\$1,195.86	\$1,195.86	\$7,150
Incr. Change in CS	\$0.00	-\$75.61	-\$79.58	-\$78.24	-\$78.43	-\$73.56	-\$39.37	-\$22.62	-\$1.07	\$7.92	\$16.89	\$16.89	\$16.89	\$16.89	\$16.89	\$16.89	-\$292
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Overall societal costs	\$0	-\$76	-\$80	-\$78	-\$78	-\$74	-\$39	-\$23	-\$1	\$8	\$17	\$17	\$17	\$17	\$17	\$17	-\$292
Cost per tonne of GHG reduction (discounted to 2003)																	\$11
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	6,009	12,696	15,056	21,266	23,374	24,083	24,431	24,879	25,066	25,260	25,260	25,260	25,260	25,260	25,260	25,260
Incr Change in Sales	0	-1,609	-1,679	-1,646	-1,636	-1,530	-819	-470	-22	165	351	351	351	351	351	351	351
Change in Revenue (\$ billions)	\$0.00	-\$0.86	-\$0.59	-\$0.48	-\$0.54	-\$0.29	-\$0.22	-\$0.16	-\$0.18	-\$0.16	-\$0.13	-\$0.13	-\$0.13	-\$0.13	-\$0.13	-\$0.13	-\$0.13
Big Three	\$0.00	-\$0.97	-\$0.73	-\$0.83	-\$0.69	-\$0.56	-\$0.48	-\$0.42	-\$0.46	-\$0.43	-\$0.42	-\$0.42	-\$0.42	-\$0.42	-\$0.42	-\$0.42	-\$0.42
Others	\$0.00	\$0.11	\$0.14	\$0.35	\$0.15	\$0.27	\$0.26	\$0.26	\$0.28	\$0.27	\$0.28	\$0.28	\$0.28	\$0.28	\$0.28	\$0.28	\$0.28
Total Market Share																	
Big Three	62%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	60.9%
Others	38%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%
Total Market Share																	
Cars	57%	60%	59%	59%	59%	59%	58%	58%	59%	58%	58%	58%	58%	58%	58%	58%	58%
Trucks	43%	40%	41%	41%	41%	41%	42%	42%	41%	42%	42%	42%	42%	42%	42%	42%	42%
Average price of new vehicles	\$27,929	\$27,238	\$27,295	\$27,328	\$27,176	\$27,301	\$27,336	\$27,372	\$27,347	\$27,358	\$27,372	\$27,372	\$27,372	\$27,372	\$27,372	\$27,372	\$27,372
<b>Transfers</b>																	
Rebates (millions)	\$0.0	-\$593.7	-\$586.7	-\$577.6	-\$595.9	-\$579.7	-\$586.1	-\$589.4	-\$597.6	-\$595.7	-\$593.5	-\$593.5	-\$593.5	-\$593.5	-\$593.5	-\$593.5	-\$593.5
Fees (millions)	\$0.0	\$593.7	\$586.7	\$577.6	\$595.9	\$579.7	\$586.0	\$589.4	\$597.6	\$595.7	\$593.5	\$593.5	\$593.5	\$593.5	\$593.5	\$593.5	\$593.5

## Scenario 11 Base Case

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Environmental Effectiveness</b>																
Avg. fuel economy of new vehicles	9.0	8.8	8.6	8.5	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.2813
Change in overall GHG emissions (MT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in overall fuel use (million litres of gasoline)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Fiscal Impact</b>																
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Economic Efficiency</b>																
Change in Consumer Surplus (\$millions)	\$0.00	\$94.58	\$180.67	\$213.22	\$296.31	\$325.62	\$325.62	\$325.62	\$325.62	\$325.62	\$325.75	\$325.75	\$325.75	\$325.75	\$325.75	\$325.75
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Overall societal costs	\$0	\$95	\$181	\$213	\$296	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326
Cost per tonne of GHG reduction																
<b>Fairness</b>																
Change in Total Sales (numbers of vehicles)	0	4,053	7,722	9,105	12,623	13,861	13,861	13,861	13,861	13,861	13,866	13,866	13,866	13,866	13,866	13,866
Change in Revenue (\$ billions)	\$0.00	\$0.22	\$0.39	\$0.46	\$0.52	\$0.66	\$0.66	\$0.66	\$0.66	\$0.66	\$0.66	\$0.66	\$0.66	\$0.66	\$0.66	\$0.66
Big Three	\$0.00	\$0.28	\$0.42	\$0.38	\$0.52	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60
Others	\$0.00	-\$0.06	-\$0.03	\$0.08	\$0.00	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06
Total Market Share																
Big Three	62%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	63%	62.7%
Others	38%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%
Total Market Share																
Cars	57%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%	56%
Trucks	43%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%
Average price of new vehicles	\$27,929	\$28,003	\$28,046	\$28,064	\$28,044	\$28,112	\$28,112	\$28,112	\$28,112	\$28,112	\$28,115	\$28,115	\$28,115	\$28,115	\$28,115	\$28,115

**Scenario 11**  
**500 Feebate, One Pivot Point, Revenue Neutral, Double Elasticities**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 total	
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.3	8.1	8.0	7.9	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.6677	
Change in overall GHG emissions (MT)	-	(0.56)	(1.13)	(1.59)	(1.96)	(2.28)	(2.63)	(3.02)	(3.43)	(3.83)	(4.15)	(4.46)	(4.73)	(4.95)	(5.17)	(5.35)	(49.25)
Change in overall fuel use (million litres of gasoline)	-	(231)	(463)	(651)	(801)	(933)	(1,077)	(1,237)	(1,404)	(1,568)	(1,700)	(1,824)	(1,935)	(2,027)	(2,117)	(2,189)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	-\$81	-\$163	-\$228	-\$281	-\$327	-\$378	-\$434	-\$493	-\$550	-\$597	-\$640	-\$679	-\$711	-\$743	-\$768	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	-\$50.82	\$33.25	\$68.43	\$151.71	\$188.25	\$190.62	\$190.90	\$191.38	\$194.01	\$196.57	\$196.57	\$196.57	\$196.57	\$196.57	\$196.57	\$993
Incr. Change in consumer surplus (\$millions)	\$0.00	-\$145.40	-\$147.42	-\$144.79	-\$144.60	-\$137.37	-\$135.00	-\$134.72	-\$134.24	-\$131.61	-\$129.17	-\$129.17	-\$129.17	-\$129.17	-\$129.17	-\$129.17	-\$1,049
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$127	\$254	\$357	\$440	\$512	\$591	\$679	\$771	\$861	\$934	\$1,001	\$1,062	\$1,113	\$1,162	\$1,202	\$4,584
Overall societal costs	\$0	-\$19	\$107	\$212	\$295	\$375	\$456	\$544	\$637	\$729	\$804	\$872	\$933	\$984	\$1,033	\$1,073	\$3,535
Cost per tonne of GHG reduction (discounted to 2003)																	-\$72
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	-2,187	1,427	2,934	6,490	8,045	8,145	8,157	8,178	8,289	8,398	8,398	8,398	8,398	8,398	8,398	8,398
Incr. Change in sales	0	-6,239	-6,295	-6,171	-6,134	-5,816	-5,716	-5,703	-5,683	-5,571	-5,468	-5,468	-5,468	-5,468	-5,468	-5,468	-5,468
Change in Revenue (\$ billions)	\$0.00	-\$2.42	-\$2.25	-\$2.15	-\$2.25	-\$2.04	-\$2.00	-\$1.96	-\$2.02	-\$2.01	-\$1.99	-\$1.99	-\$1.99	-\$1.99	-\$1.99	-\$1.99	-\$1.99
Big Three	\$0.00	-\$3.11	-\$2.93	-\$3.00	-\$2.91	-\$2.82	-\$2.74	-\$2.68	-\$2.74	-\$2.72	-\$2.71	-\$2.71	-\$2.71	-\$2.71	-\$2.71	-\$2.71	-\$2.71
Others	\$0.00	\$0.69	\$0.68	\$0.85	\$0.66	\$0.78	\$0.74	\$0.72	\$0.72	\$0.71	\$0.72	\$0.72	\$0.72	\$0.72	\$0.72	\$0.72	\$0.72
Total Market Share																	
Big Three	62%	57%	58%	57%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	57.7%	
Others	38%	43%	42%	43%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	42%	
Total Market Share																	
Cars	57%	63%	63%	63%	63%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	62%	
Trucks	43%	37%	37%	37%	37%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	
Average price of new vehicles	\$27,929	\$26,330	\$26,384	\$26,422	\$26,297	\$26,408	\$26,432	\$26,461	\$26,416	\$26,425	\$26,436	\$26,436	\$26,436	\$26,436	\$26,436	\$26,436	
<b>Transfers</b>																	
Rebates (millions)	0	-561,5682	-537,8804	-527,7823	-544,9576	-534,4311	-544,5633	-543,4621	-554,4396	-553,2103	-551,7506	-551,7506	-551,7506	-551,7506	-551,7506	-551,7506	
Fees (millions)	0	561,5668	537,8586	527,8116	544,9501	534,4094	544,5633	543,4527	554,4252	553,2001	551,737	551,737	551,737	551,737	551,737	551,737	

**Scenario 12****\$1.2 -- 500 Feebate, One Pivot Point, Revenue Neutral**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Total	
<b>Environmental Effectiveness</b>																	
Avg. fuel economy of new vehicles	9.0	8.5	8.3	8.2	8.0	8.0	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8387	
cars	7.6	7.3	7.2	7.1	6.9	6.9	6.8	6.8	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7472	
Trucks	10.7	10.3	9.9	9.8	9.7	9.6	9.5	9.5	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4152	
Change in overall GHG emissions (MT)	-	(0.2)	(0.5)	(0.7)	(0.8)	(0.9)	(1.1)	(1.3)	(1.5)	(1.7)	(1.8)	(2.0)	(2.1)	(2.2)	(2.3)	(2.4361)	(21.50)
Change in overall fuel use (million litres of gasoline)	-	(94.2)	(189.6)	(266.9)	(328.2)	(381.3)	(445.7)	(520.8)	(601.6)	(681.2)	(747.4)	(808.9)	(865.0)	(912.6)	(959.0)	(997.1361)	
<b>Fiscal Impact</b>																	
Total rebate and total fees (\$millions)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in fuel tax revenue to government (\$millions)	\$0	-\$44	-\$89	-\$125	-\$154	-\$178	-\$209	-\$244	-\$282	-\$319	-\$350	-\$379	-\$405	-\$427	-\$449	-\$467	
<b>Economic Efficiency</b>																	
Change in Consumer Surplus (\$millions)	\$0.00	\$76.97	\$213.60	\$265.60	\$399.30	\$449.40	\$461.73	\$466.65	\$475.16	\$478.88	\$482.33	\$482.33	\$482.33	\$482.33	\$482.33	\$482.33	\$2,814
Incr. Change in Consumer Surplus (\$millions)	\$0.00	-\$73.93	-\$76.30	-\$75.37	-\$75.34	-\$70.77	-\$58.44	-\$53.52	-\$45.01	-\$41.29	-\$38.02	-\$38.02	-\$38.02	-\$38.02	-\$38.02	-\$38.02	-\$451
Change in Total Fuel Cost (net of fuel tax) (\$millions)	\$0	\$38	\$76	\$107	\$132	\$153	\$179	\$209	\$242	\$274	\$300	\$325	\$348	\$367	\$385	\$401	\$1,445
Overall societal costs	\$0	-\$36	\$0	\$32	\$57	\$83	\$121	\$156	\$197	\$233	\$262	\$287	\$310	\$329	\$347	\$363	\$994
Cost per tonne of GHG reduction (Discounted to 2003))																	-\$46
<b>Fairness</b>																	
Change Total Sales (numbers of vehicles)	0	1,956	5,202	6,355	9,384	10,424	10,669	10,741	10,924	10,999	11,066	11,066	11,066	11,066	11,066	11,066	
Incr. Change in Sales	0	-1,279	-1,000	-934	-744	-668	-423	-350	-168	-93	-29	-29	-29	-29	-29	-29	
Change in Revenue (\$ billions)	\$0.00	-\$1.09	-\$0.94	-\$0.88	-\$0.90	-\$0.75	-\$0.71	-\$0.66	-\$0.69	-\$0.67	-\$0.66	-\$0.66	-\$0.66	-\$0.66	-\$0.66	-\$0.66	
Big Three	\$0.00	-\$1.38	-\$1.24	-\$1.30	-\$1.21	-\$1.13	-\$1.07	-\$1.03	-\$1.06	-\$1.04	-\$1.03	-\$1.03	-\$1.03	-\$1.03	-\$1.03	-\$1.03	
Others	\$0.00	\$0.29	\$0.30	\$0.43	\$0.30	\$0.38	\$0.37	\$0.36	\$0.37	\$0.37	\$0.38	\$0.38	\$0.38	\$0.38	\$0.38	\$0.38	
Total Market Share																	
Big Three	62%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60.2%	
Others	38%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	
Total Market Share																	
Cars	57%	60%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	
Trucks	43%	40%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%	
Average price of new vehicles	\$27,929	\$27,160	\$27,207	\$27,231	\$27,163	\$27,244	\$27,270	\$27,297	\$27,279	\$27,286	\$27,294	\$27,294	\$27,294	\$27,294	\$27,294	\$27,294	
cars	\$24,522	\$23,763	\$23,797	\$23,834	\$23,666	\$23,713	\$23,740	\$23,752	\$23,731	\$23,731	\$23,736	\$23,736	\$23,736	\$23,736	\$23,736	\$23,736	
Trucks	\$32,358	\$32,207	\$32,182	\$32,187	\$32,278	\$32,349	\$32,378	\$32,413	\$32,416	\$32,425	\$32,433	\$32,433	\$32,433	\$32,433	\$32,433	\$32,433	
<b>Transfers</b>																	
Rebates (millions)	-	589.13	575.18	568.64	580.72	563.57	572.31	577.06	586.29	584.68	582.99	582.99	582.99	582.99	582.99	582.99	
Fees (millions)	-	589.10	575.18	568.65	580.73	563.57	572.31	577.06	586.30	584.70	582.99	582.99	582.99	582.99	582.99	582.99	