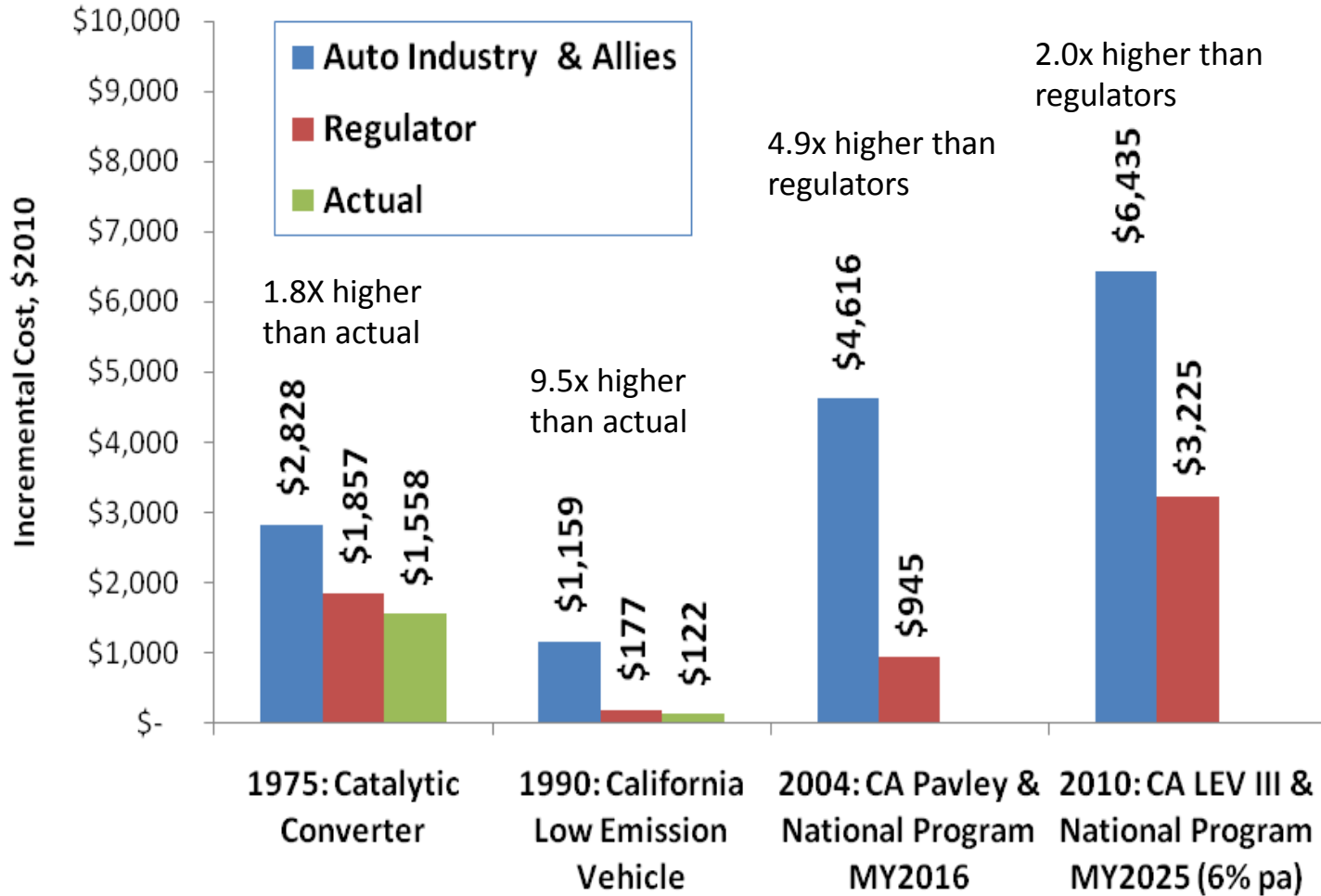


The Cost of Motor Vehicle Pollution Control Industry vs. Regulator & Actual



Sources

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CAR analysis relies on NAS study of *near-term* fuel economy potential

CAR analysis uses NAS study as the basis of its cost estimates.

But NAS study only examined technologies that are available *now*. Its cost estimates are for 2009-2015. Thus CAR analysis has higher costs and lower fuel economy potential.

Technology Cost Summary

Pathway	Source of Estimate	Fuel Economy Improvement	2008 Total Estimated Incremental Cost
SI - 1 Spark Ignited	NAS	30%	\$2,200
SI - 2 SI Extended Mass	CAR	36%	\$3,060
SI - 3 SI Extended + Stop/Start	CAR	38%	\$3,945
CI - 1 Compression Ignited	NAS	38%	\$5,900
CI - 2 CI Extended Mass	CAR	40%	\$6,760
E - 1 Hybrid - Medium	NAS	44%	\$6,000
E - 2 Hybrid - Medium Extended	CAR	47%	\$6,860
E - 3 Hybrid - Strong	CAR/NAS	140%	\$11,000
E - 4 Electric Vehicle	CAR	600%	\$22,000

(Results are approximate, estimated for intermediate car, large car and unibody truck combined)

15 CAR Briefing Series - December 15, 2010

Technologies for Reducing Fuel Consumption

Tables S-1 and S-2 show the committee's estimates of fuel consumption benefits and costs for technologies that are commercially available and can be implemented within 5 years. The cost estimates represent estimates for the current (2009/2010) time period to about 5 years in the future. The committee based these estimates on a variety of sources, including recent reports from regulatory agencies and other sources on the costs and benefits of technologies; estimates obtained from suppliers on the costs of components; discussions with experts at automobile manufacturers and suppliers; detailed teardown studies of piece costs for individual technologies; and comparisons of the prices for and amount of fuel consumed by similar vehicles with and without a particular technology.

Prepublication Copy-Subject to Further Editorial Correction

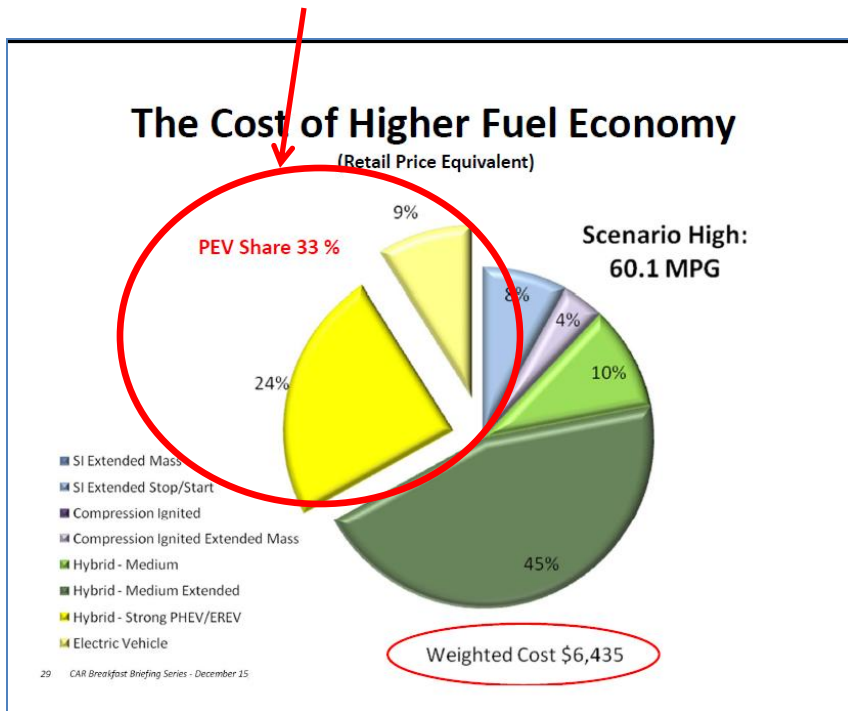
S-1

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Tables S-1 and S-2 show the committee's estimates of fuel consumption benefits and costs for technologies that are commercially available and can be implemented within 5 years. The cost estimates represent estimates for the current (2009/2010) time period to about 5 years in the future. The committee based these estimates on a variety of

CAR analysis requires 2-3x more electric vehicles than EPA et al.

CAR requires 33% plug-in hybrid and electric vehicles



Joint Technical Assessment Report (EPA, NHSTA, and CARB) requires 9% to 14%

Table 4: Technology Penetration Estimates for MY 2025 Vehicle Fleet

Scenario	Technology Path	New Vehicle Fleet Technology Penetration				
		Mass Reduction ¹	Gasoline & Diesel Vehicles	HEVs	PHEVs ²	EVs
6%/year	Path A	14%	23%	68%	2%	7%
	Path B	19%	48%	43%	2%	7%
	Path C	26%	53%	44%	0%	4%
	Path D	14%	29%	55%	2%	14%

TAR is more optimistic about improvements to conventional gasoline engine vehicles, thus reducing the need for PEVs