

**ATTORNEYS GENERAL OF THE STATES OF CALIFORNIA, MASSACHUSETTS,
NEW JERSEY, NEW MEXICO, NEW YORK, AND OREGON, SECRETARY OF THE
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL
PROTECTION, AND NEW YORK CITY CORPORATION COUNSEL**

Via Upload to Docket No. NHTSA-2008-0060 at www.regulations.gov

August 18, 2008

The Honorable James F. Ports, Jr.
Deputy Administrator
National Highway Traffic Safety Administration
U.S. Department of Transportation
West Building
1200 New Jersey Ave., SE
Washington, D.C. 20590

RE: Comments Regarding Draft Environmental Impact Statement for New Corporate
Average Fuel Economy Standards [Docket No. NHTSA-2008-0060]

Dear Administrator Ports:

The Attorneys General of the States of California, Massachusetts, New Jersey, New Mexico, New York, Oregon, the Secretary of the Commonwealth of Pennsylvania Department of Environmental Protection, and the Corporation Counsel of the City of New York submit these comments regarding the Draft Environmental Impact Statement (“DEIS”) for the New Corporate Average Fuel Economy (“CAFE”) Standards for Model Years 2011-2015.¹

SUMMARY

In the past, the National Highway Traffic Safety Administration (“NHTSA”) dismissed the impact of its fuel economy rulemaking on global warming by stating that the relatively small changes in greenhouse gas (“GHG”) emissions caused by the CAFE rule, when compared to global emissions overall, were insignificant. Having been instructed by the Ninth Circuit Court of Appeals that this approach is improper,² NHTSA has now issued a DEIS addressing GHG

¹A number of state attorneys general and state agencies, and several municipalities, have previously provided comments to NHTSA on the scoping of the DEIS and on the substance of the new CAFE rule. We are providing copies of the earlier submissions as attachments to this letter.

²See *Center for Biological Diversity v. National Highway Traffic Safety Administration (NHTSA)*, 508 F.3d 508, 554, 556, 558 (9th Cir. 2007). The Ninth Circuit today withdrew its former opinion and filed a new opinion in this matter. *Center for Biological Diversity v. NHTSA*,

emissions from the CAFE rule and the impact on global warming.

While we commend the Agency for beginning the steps toward preparing an Environmental Impact Statement in compliance with the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4232 *et seq.*, and, in particular, addressing the impact of the CAFE rule on GHG emissions and global warming, we have significant concerns about the manner in which the DEIS analyzes and presents the information. We believe that the deficiencies in the analysis and presentation make the document violative of NEPA.

As discussed below, NHTSA has presented the data on GHG emissions and global warming in a manner that emphasizes that relatively small changes in GHGs, when viewed in isolation, cause relatively modest effects in global warming. Thus, NHTSA underplays the significance of its CAFE rulemaking by stating that the alternatives “do not prevent climate change from occurring, but only result in small reductions in the anticipated increases in CO₂ concentrations, temperature, precipitation, and sea level.” DEIS at S-4. As the Ninth Circuit, however, pointed out, global warming is by nature a phenomenon that can only be addressed through the cumulative impact of numerous small changes. “Any given rule setting a CAFE standard might have an ‘individually minor’ effect on the environment but these rules are ‘collectively significant actions taking place over a period of time.’” *Center for Biological Diversity*, 508 F.3d at p. 550 (quoting 40 C.F.R. § 1508.7). Thus, while the effects of the CAFE rule in isolation may be relatively insignificant, in combination with other actions, they are what will determine the future of our world.

The critical question that must be addressed in the DEIS is not whether relatively modest changes in carbon dioxide (“CO₂”) concentrations and temperature will result from one or even two iterations of the CAFE rule, but rather whether the CAFE rule and reasonably anticipated future CAFE rules, when combined with actions that are being taken and will be taken globally, put us on a path to keeping GHG emissions below the level required to prevent catastrophic climate change. If the new CAFE rule continues a trajectory of emissions and CO₂ concentrations that scientists anticipate will lead to environmental cataclysm, the DEIS must reveal and explain that to the public.

Further, the answer to this question is required as much by the Energy Policy and Conservation Act (“EPCA”), 49 U.S.C. §§ 32902 *et seq.*, as it is by NEPA. As NHTSA acknowledges, environmental effects, including global warming, are an aspect of our need to conserve energy, and are therefore a component of the factors that NHTSA must consider under EPCA in setting the CAFE standard. DEIS at 1-2. Ultimately, therefore, the DEIS must disclose

whether NHTSA has adequately considered the environmental impacts of its new CAFE rule, and determined whether the need to reduce GHG emissions is of such critical importance that it requires the Agency to place more emphasis on energy conservation and to set the CAFE standard at a significantly higher level than proposed. In this case, the higher level would be represented either by the 25% above optimized, 50% above optimized, total cost equal total benefits, or technology exhaustion level alternatives.³ The DEIS does not answer this question.

Because NHTSA has not performed the analysis necessary for either the decisionmakers or the public to understand the ramifications of the Agency's decision, the DEIS is inadequate. The Agency should therefore issue a new draft document and circulate it for public review and comment prior to finalizing an environmental impact statement and proceeding with the rulemaking.

DISCUSSION

NEPA has a two-fold purpose. In addition to ensuring that the agency has available and considers information concerning significant environmental impacts, NEPA "also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989); *see also Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989) (NEPA focuses both "Government and public attention on the environmental effects of proposed agency action.").

The DEIS for the proposed CAFE rule fulfills neither purpose, since it does not provide the critical information that must be considered by both the decisionmaker and the public.

1. The DEIS Misleads the Public

In order to fulfill NEPA's goal of informing the public of the environmental impacts of the agency's decision, the EIS must "be written in plain language and may use appropriate graphics so that decisionmakers and the public can readily understand them" 40 C.F.R. § 1502.8. Further, the EIS "must be organized and written so as to be readily understandable by governmental decisionmakers and by interested non-professional laypersons likely to be affected by actions taken under the [FEIS]." *Earth Island Institute v. U.S. Forest Service*, 442 F.3d 1147, 1160 (9th Cir. 2006) (quoting *Oregon Environmental Council v. Kunzman*, 817 F.2d 484, 494

³ The "optimized" alternative, which is NHTSA's preferred alternative is based on "applying technologies until net benefits (discounted at 7 percent) are maximized." Technology exhaustion includes "all technologies NHTSA considered to be available without regard to cost . . ." DEIS at 2-8.

(9th Cir. 1987).) The DEIS fails to meet this standard.

a. The DEIS Must Clarify that GHG Emissions from Passenger Cars and Light Trucks Will Continue to Increase From Past Levels

One of the most significant pieces of information that must be clarified in the DEIS is that, under the new CAFE rule, GHG emissions from passenger cars and light trucks will continue to rise over past levels, because the increase in miles per gallon (“mpg”) mandated by the rule will not completely offset the increase in vehicle miles traveled (“VMT”).

Rather than making this increase clear, the DEIS buries the information in the text of the document (*e.g.*, DEIS at 3-57) and repeatedly refers to the *reductions* in emissions, CO₂ concentration, and temperature.⁴ In fact, the only reduction is in the amount of growth in each of these measures over what would otherwise occur without the new rule. The absolute levels are rising and will continue to rise. This distinction must be made clear both in the labeling of the graphs and figures, and in the text of the DEIS.

b. The DEIS Improperly Compares the Decrease in Growth of Emissions From the CAFE Rule with the Absolute Decrease in Emissions From the U.S. Regional Programs, Creating a False Impression of the Benefits of the Rule

The DEIS further misleads the public by setting up a false comparison between the reduction in growth of GHG emissions from the CAFE alternatives, and the absolute decrease in emissions from the climate programs created by groups of states such as the Western Climate Initiative (“WCI”) and the Regional Greenhouse Gas Initiative (“RGGI”). DEIS at 3-57, 4-28 to 4-29. For example, in the cumulative impacts section, the DEIS states that the WCI has a goal of reducing CO₂ equivalent emissions by 350 million metric tons (“MMT”) from 2009 to 2020, and the CAFE rule will reduce CO₂ emissions by 455-830 MMT over the same time period. The DEIS further states that the RGGI will reduce CO₂ emissions by 268 MMT from 2006 to 2024 and the CAFE rule will reduce CO₂ emissions by 1,100-1,834 MMT over the same time frame. The DEIS therefore concludes that “the alternatives analyzed here deliver GHG emission reductions that are on the same scale as many of the most progressive and ambitious GHG emission reduction programs underway in the United States.” DEIS at 4-29.

⁴ *See, e.g.*, DEIS at 2-14, 2-16 and Table 2.5-3, 2-20, 3-54 (referring to GHG “emissions reductions”); DEIS at 2-17 and Table 2.5-5 (“Reductions in Global Mean Precipitation”); DEIS at 4-27 (“Cumulative emissions reductions,” “cumulative CO₂ reductions”); DEIS at 4-28 (“Total emission reductions”).

The above analysis, and in particular, the latter statement, are affirmatively misleading. The regional goals represent absolute reductions from prior levels. In reducing CO₂ equivalents by 350 MMT, the WCI is actually committed by 2020 to bringing its level of emissions *15% below the levels that existed in 2005*. See Western Climate Initiative, Statement of Regional Goal, 2007 at 1.⁵ Similarly, the RGGI will result in a 2018 emissions budget that is 10% smaller than the 2009 emissions budget. See Overview of RGGI CO₂ Budget Training Program, October 2007 at 2.⁶ In contrast, the emission figures cited by NHTSA as attributable to the CAFE rule actually represent a significant increase above previous levels. In order to be “on the same scale as many of the most progressive and ambitious GHG emission reduction programs underway in the United States,” the CAFE rule would have to reduce the level of GHG emissions below existing levels. Clearly, no such reduction is envisioned. In fact, a more accurate statement would be to say that the increase in GHG emissions from previous levels allowed by the CAFE rule would wipe out reductions in emissions achieved by the various regional climate coalitions.

2. The DEIS Fails to Consider the Cumulative Impacts of CAFE Rulemakings After 2020 and of Actions By Other Agencies

A federal agency is required to evaluate whether a project's impacts, though individually limited, are cumulatively significant. A cumulative impact

is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions *regardless of what agency (Federal or non-Federal) or person undertakes such other actions*. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Id. § 1508.7 (emphasis added).

The Ninth Circuit emphasized the necessity and scope of a cumulative impacts analysis in the context of the CAFE rulemaking when it held that NHTSA must assess the “effects of *its* actions on global warming within the context of other actions that also affect global warming.” *Center for Biological Diversity*, 508 F.3d at p. 550 (emphasis in original). The court further noted that NHTSA must therefore “provide the necessary contextual information about the cumulative and incremental environmental impacts of the Final Rule in light of other CAFE rulemakings and other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.” *Id.*

⁵Available at www.westernclimateinitiative.org/ewebeditpro/items/O104F13006.pdf.

⁶Available at www.rggi.org/docs/program_summary_10_07.pdf.

NHTSA's cumulative impacts analysis fails to comply with this mandate and is flawed in several respects. On the one hand, in projecting the impact of the CAFE rule through 2100, NHTSA considers only the CAFE rules for 2011-2015 and 2016-2020, and assumes that miles per gallon will remain the same from 2020 through 2100. DEIS at 4-19, 4-27. On the other hand, it appears that NHTSA assumes that VMT will continue to increase through 2100. DEIS at 3-57. The combination of these assumptions understates NHTSA's ability to contribute cumulatively to GHG reduction efforts through more stringent CAFE standards. In the same way that it can be anticipated that VMT will continue to increase after 2020, it can also be anticipated that future CAFE rulemakings after 2020 will continue to increase the miles per gallon required for cars and light trucks, and that improved technology will enable car manufacturers to meet those increases. Thus, NHTSA must recalculate its cumulative projections to take into account the impact of future CAFE rulemakings after 2020 on the anticipated emissions through 2100.

Further, in its cumulative impacts analysis, NHTSA takes into account only the impact of its own rulemaking and ignores actions that can be anticipated in the transportation sector overall, and in other energy sectors in the United States and globally. *See, e.g.,* WCI Statement of Regional Goal; Overview of RGGI CO₂ Budget Trading Program, *supra*. The DEIS then compares the limited changes in the CAFE sector with worldwide emissions to determine the effect of these changes on CO₂ concentrations and temperature. *See, e.g.,* DEIS at 4-24, 4-31. The analysis demonstrates, not surprisingly, that the change in CO₂ concentrations and temperature caused solely by the CAFE rules will be relatively modest, ranging from 3.5 to 4.9 parts per million ("ppm") CO₂ concentration, and 0.012 to 0.018 degrees Celsius temperature. Table 4.4-3 at DEIS 4-31.

This comparison is invalid because it considers only the very limited change from the CAFE rules, while ignoring the cumulative impact of all other reasonably anticipated actions that will reduce GHG emissions both in the United States and globally. A proper cumulative impacts analysis requires the agency to consider reasonably anticipated actions by other agencies along with the impact of the CAFE rules, to determine the impact on GHG emissions and global warming.

We recognize that a cumulative impacts analysis is complex in the context of climate change because the problem is global and is being addressed at many levels worldwide. While it is difficult to determine the expected emissions reductions on a global scale, this uncertainty should not result in NHTSA understating the significance of its role in helping to resolve the climate problem. NHTSA thus must make an effort to determine whether better decisionmaking on its part, and a more stringent CAFE standard, will help to put this country on a path to climate stabilization, even if the Agency, standing alone, cannot resolve the problem.

One reasonable way to approach the analysis is to use the "stabilization wedge" concept

relied on by the U.S. Environmental Protection Agency (“EPA”) in discussing transportation emissions. (“EPA Transportation Wedge Analysis”).⁷ The wedge analysis permits evaluations based on cumulative reductions over longer time frames:

[T]he wedge approach . . . provides a metric to make evaluations based on *cumulative* emission reductions over a longer timeframe rather than the more commonly used metrics: percent GHG reduction or absolute GHG reductions for a specific analysis year. From a climate perspective, it is *cumulative* emission reductions over longer time frames that are of primary significance. Discussions of reductions have tended to focus almost exclusively on incremental rather than cumulative emission reductions. Issues of timing and staging of the approaches can also be considered using the wedge analysis (*e.g.* the impact of near-term versus long-term technologies). Finally, the wedge analysis can be scaled to fit any analysis level of interest, including a specific emissions category, economic sector, or national and global levels.

EPA Transportation Wedge Analysis at 9-10 (emphasis in original). This analysis is discussed in more detail in Section 3.b below.

3. The DEIS Fails to Present the Data in a Meaningful Context

a. The DEIS Fails to Consider the Scientific Consensus that CO₂ Concentrations Must Be Kept Below the Level of “Dangerous Anthropogenic Interference”

While the DEIS provides a significant amount of raw data, the data are meaningless unless they are put into context. For example, simply reporting that the new CAFE rule puts us on a trajectory to reaching CO₂ levels of over 700 ppm and an increase in temperature of over 2.7 degrees Celsius by 2100 (DEIS at 4-31), is meaningless to the uninitiated because it does not provide the context related to the “tipping point” beyond which devastating and irreversible climate change impacts may occur.

While the DEIS mentions the concept of a climate “tipping point” and the fact that some climate scientists believe that a CO₂ level exceeding about 450 ppm is dangerous (DEIS at 3-52 to 3-53), it then dismisses these concepts as “still a matter of scientific investigation” (DEIS at 1-10), and claims that “the state of the science does not allow for a characterization of how the

⁷Miu, S., J. *et al.*, A Wedge Analysis of the U.S. Transportation Sector, U.S. EPA, Transportation and Climate Division, Office of Transportation and Air Quality, EPA 420-R-07-007, April 2007 available at www.epa.gov/oms/climate/420r07007.pdf.

CAFE alternatives influence these risks, other than to say that the greater the emission reductions, the lower the risk of abrupt climate change.” DEIS at 3-53 to 3-54, 4-26.

This perfunctory discussion is unacceptable. To put the raw data into a meaningful context, the DEIS should emphasize the scientific consensus that we must lower our GHG emissions significantly in order to keep CO₂ concentrations in the atmosphere below a threshold that represents “dangerous anthropogenic interference” (“DAI”). In the words of the Ninth Circuit, there is “compelling scientific evidence concerning ‘positive feedback mechanisms’ in the atmosphere” that could lead to abrupt and non-linear changes. *Center for Biological Diversity*, 508 F.3d at p. 554. While the precise level for DAI is not known, scientists generally agree that the threshold is *below* 550 ppm CO₂.⁸ At higher levels it is likely we will have reached an irrevocable “tipping point” and the Greenland ice sheet and part of the west Antarctic ice sheet will ultimately melt, causing a 5 to 10 meter rise in global sea level, which will cause flooding of all major coastal cities, and ensure global cataclysm. Further, it is plausible that DAI will be reached even at CO₂ concentrations of 450 ppm or substantially lower.⁹ The risk of environmental cataclysm, even if uncertain, is so enormous, that it cannot simply be ignored, as NHTSA does.

⁸ The United Nations Intergovernmental Panel on Climate Change (“IPCC”) B1 scenario anticipates that CO₂ emissions will be stabilized at about 550 ppm. See Nakicenovic, N. & Swart, R. Special Report of the Intergovernmental Panel on Climate Change on Emissions Scenarios (Cambridge Univ. Press, 2000), Summary for Policymakers available online at <http://www.ipcc.ch/pdf/special-reports/spm/sres-en.pdf>; IPCC Third Assessment Report, Climate Change 2001, The Scientific Basis, Chapter 3, Figure 3-12, available at http://www.grida.no/climate/ipcc_tar/wg1/fig3-12.htm; I.C. Prentice *et al.*, “The Carbon Cycle and Atmospheric Carbon Dioxide,” in *Climate Change 2001: The Scientific Basis*, J.D. Houghton *et al.*, Eds. (Cambridge Univ. Press, Cambridge, 2001) pp. 183-237, available at http://www.grida.no/CLIMATE/IPCC_TAR/WG1/index.htm. The most recent Fourth Assessment of the IPCC (*see* note 18, *infra*) indicates a best estimate under this scenario of warming just under two degrees Celsius. However, the IPCC also recognizes that, under this scenario, there is a significant (nearly 50%) probability of greater warming. If two degrees Celsius represents dangerous anthropogenic interference, then CO₂ emissions must be stabilized at 450 ppm or lower to guarantee that we will stay below the level of DAI.

⁹ See Hansen, J. *et al.*, Global Temperature Change, Proceeding of the National Academy of Sciences, doi:10.1073/pnas.0606291103, 2006, available at www.pnas.org/content/103/39/14288.full.pdf; Hansen, J., *et al.*, Dangerous human-made interference with climate: a GISS ModelE study, *Atmos. Chem. Phys.*, 7, 2287-2312, 2007, available at http://pubs.giss.nasa.gov/abstracts/2007/Hansen_et_al_1.html.

At the very least, the DEIS must inform the agency and the public that scientists agree that there is an area of dangerous anthropogenic interference in the range of 500 ± 50 ppm CO₂, or possibly lower, that must be avoided. This information must be incorporated into and direct the analysis. Without such information, it is clear that NHTSA has, in fact, not considered the issues in a meaningful way.

b. The DEIS Does Not Answer the Ultimate Question of Whether the Agency Has Adequately Considered Our Need to Reduce GHG Emissions and to Stabilize CO₂ Concentrations

In the end, neither the Agency nor the public can assess the impact of the CAFE rule on global warming unless the data are put into a meaningful context, which the DEIS has failed to do. One way to remedy this fundamental defect would be to refer to the various emissions scenarios modeled by the IPCC as a kind of a comparative baseline. These scenarios include the “business as usual” scenario, usually represented by the IPCC’s A1B scenario, which assumes rapid economic growth, peak population by 2050, declining thereafter, rapid introduction of new, more efficient technologies, and a balanced use of both fossil and non-fossil fuels.¹⁰ The A1B scenario stabilizes CO₂ concentrations at 720 ppm by 2100 and is associated with additional warming of 2 to 4 degrees Celsius,¹¹ which puts us well into the region of likely dangerous anthropogenic interference.¹²

The IPCC’s “alternative” scenarios, are those in which human inputs to global warming are constrained to varying degrees and the effects of global warming are mitigated to greater and lesser extent. In particular, the B1 scenario will reduce GHG emissions below 1990 levels well before 2100 and will maintain CO₂ concentrations below 550 ppm.¹³ Under this alternative scenario, GHG emissions could continue to increase briefly, but would need to level out quickly, and decline before 2050, in order to allow for the possibility of adaptation that will avoid a catastrophic disruption of life on Earth. In order to stabilize CO₂ concentrations below 450 ppm,

¹⁰IPCC Summary for Policy Makers at 22, note 10, *supra*.

¹¹*See* IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.), Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, at 13, 14, and Figure SPM.5 and Table SPM.3, available at <http://www.ipcc.ch/ipccreports/ar4-wg1.htm>.

¹² *See* note 9, *supra*.

¹³ *See* note 8, *supra*.

emissions would have to be lowered even sooner, with emission levels peaking by 2020 and then declining sharply. Even at this level, scientists predict warming of 2.0 degrees Celsius and sea level rise of half a meter or more by 2100.¹⁴

In the DEIS, NHTSA views the IPCC A1B scenario as representing the “no-action alternative.” DEIS at 3-51, 4-24. As noted above, NHTSA simply subtracts the changes in GHG emissions attributable to the various CAFE alternatives from the A1B emissions scenario to determine the effect on CO₂ concentration and temperature. *See* DEIS at 4-22, 4-51.

This analysis, however, is not meaningful, because it does not inform the reader whether the actions of the Agency, coupled with anticipated actions of other agencies, will be sufficient to change our trajectory from the A1B “no-action” scenario, to the B1 scenario of stabilized CO₂ concentration and temperature. Thus, neither the agency nor the public can determine whether NHTSA has considered and given sufficient weight to the dangers of global warming in setting the CAFE standard at the “optimized” level, rather than at a higher level.

In order to answer the latter question, NHTSA must consider its actions within the context of the steps that are being taken or are reasonably foreseeable to be taken by all agencies, organizations, nations, and localities to prevent CO₂ concentrations in the atmosphere from reaching a level of dangerous anthropogenic interference. As noted above, it is generally agreed that, in order to maintain CO₂ concentrations at the 500 ± 50 ppm level, emissions must stabilize and begin to decline either by 2020 or 2050. Given this consensus, the DEIS should calculate what CAFE mileage standard would have to be reached by those dates, taking into account anticipated increases in VMT, in order to stabilize and reduce GHG emissions from passenger cars and light trucks. The DEIS must then determine whether the new CAFE rule moves us forward sufficiently so that we will be poised to reach the required future goals. If the proposed CAFE rule will not enable us to stabilize and begin to reduce emissions by 2020 or 2050, then what CAFE standard is necessary now to enable us to achieve the future reductions?

In making this determination, the DEIS could also make use of the concept of “stabilization wedges,” first advanced by Pacala and Socolow.¹⁵ Pacala and Socolow envisioned the 50-year reductions scenario as a triangle, with the sides of the stabilization triangle

¹⁴ Ramhstorf, S., A Semi-Empirical Approach to Projecting Future Sea-Level Rise, *Science*, 315, 368-70, 2007, available at www.pik-potsdam.de/~stefan/Publications/Nature/rahmstorf_science_2007.pdf.

¹⁵Pacala, S. and R. Socolow, Stabilization Wedges: Solving the Climate Problem for the Next 50 years with Current Technologies, *Science*, Vol. 305, August 13, 2004, 968-72, available at <http://solo.colorado.edu/~jaburns/Astr4800Fall07/Readings/pacalasocolow.pdf>.

delineated by a flat emissions trajectory of 7 gigatons carbon per year (“GtC/year”) by 2054, with a decline to zero emissions by sometime after 2100, and a “business as usual” scenario represented by a straight-line ramp rising to 14 GtC/year in 2054. (*Id.* at p. 968)¹⁶ They then divided the stabilization triangle into seven equal wedges representing reductions in GHG emissions. Filling all seven wedges results in reducing GHG emissions sufficiently to stabilize CO₂ concentrations at 500 ppm. (*Id.*) In particular, they note that we will achieve one wedge of the stabilization triangle if cars in 2054 averaged 60 miles per gallon globally. (*Id.* at 969.)

The wedge analysis was applied by the EPA in discussing GHG emissions from the U.S. transportation sector. The EPA calculated that nine transportation wedges, each representing a reduction of 5,000 million metric tons of CO₂ equivalents (“MMTCO₂e”) between now and 2050 would be enough to flatten emissions in the transportation sector. Of the nine wedges, about half (4.3) would be enough to flatten emissions from passenger vehicles. EPA Transportation Wedge Analysis at 2. The EPA analysis notes that the reductions in emissions from passenger vehicles will come from vehicle technology, alternative fuels, and travel demand reduction, acting in concert. The document then presents various vehicle technologies and the “reduction potential” for the technology in terms of wedges. *Id.* at 11, 12.

NHTSA could, consistent with the EPA analysis, compare the GHG emissions from the proposed CAFE alternatives with the 4.3 wedges of reductions needed from the passenger car sector to reach emission stabilization by 2054 and begin the necessary decline in emissions.¹⁷ This will enable the Agency to determine whether the proposed alternative will slow emissions growth sufficiently from the passenger car and light truck sector to flatten emissions as anticipated by the EPA analysis. If it will not, NHTSA must reassess the alternatives.

We present these related proposals as suggestions for how the Agency can analyze and present the data contained in the DEIS to make it meaningful. Ultimately, however NHTSA chooses to present the data, there must be some analysis that enables the Agency and the public to determine whether the proposed CAFE rule, when combined with other anticipated actions, is sufficiently stringent to reduce, over time, GHG emissions and stabilize CO₂ concentrations at levels that will prevent us from reaching the area of dangerous anthropogenic interference. If the

¹⁶We note, however, that the analysis was performed in 2004. Four years later, the amount of emissions reductions per wedge will have increased, so that the 7 GtC/year is likely too low an estimate.

¹⁷Additional reductions may be created by other actions, such as those that reduce travel demand or VMT. However, these further reductions will be necessary to lower GHG emissions even further in order to reduce CO₂ concentrations below 500 ppm. (EPA Transportation Wedge Analysis at 7.)

proposed CAFE rule is not sufficiently stringent to reach those goals, then NHTSA has not properly considered whether our need to conserve energy and lower GHG emissions outweighs the remaining factors under EPCA, and requires a stricter CAFE standard and higher fuel economy.

c. The DEIS Fails to Make Clear the Connection Between Anticipated CO₂ Concentrations and Extreme Environmental Impacts

Finally, the DEIS contains a qualitative discussion in chapter 4 of the potential impacts of global warming, but avoids linking the CAFE rule with particular impacts, noting that the impacts from the rule in isolation are too small to quantify. DEIS at 2-13. While technically correct that the GHG emissions from the CAFE rule in isolation cannot be linked to particular environmental impacts, the DEIS should make clear that the levels of CO₂ concentrations and temperature increase that it anticipates, more than 700 ppm CO₂ and 2.7 degrees Celsius (Table 4.43 at DEIS 4-31), are directly associated with some of the more extreme environmental effects.

One way to explain the connection between the atmospheric concentrations of CO₂ and the increased temperatures anticipated by the DEIS on the one hand, and the real environmental effects on the other, would be to rely on the materials presented by the IPCC. For example, Figure SPM.2¹⁸ illustrates graphically how various extreme environmental effects become increasingly likely as temperature rises. Notably, the figure demonstrates that the increase in temperature of 2.7 degrees Celsius anticipated by the DEIS may result in the extinction of more than 20 to 30% of the species on earth, coastal flooding affecting millions of people, increasing burdens from malnutrition and disease, and increased mortality from heatwaves, floods, and droughts. This type of graphic representation will, consistent with the purposes of NEPA, enable the reader to understand that, in setting the CAFE standard, NHTSA anticipates that we are potentially on the path to dangerous anthropogenic interference and cataclysmic climate change.

CONCLUSION

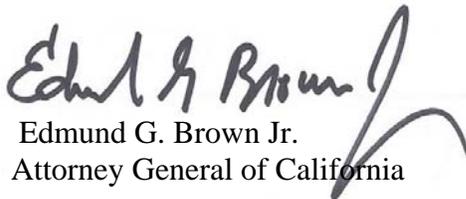
The DEIS is a step forward in acknowledging the impact of GHG emissions on climate change and the environment. The document contains a significant amount of raw data. The data are, however, presented in a confusing manner and without the necessary context. Ultimately, the DEIS does not enable either the Agency or the public to assess accurately the cumulative

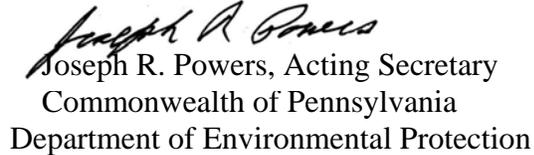
¹⁸ IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 7-22, at 16, available at <http://www.ipcc.ch/ipccreports/ar4-wg2.htm>.

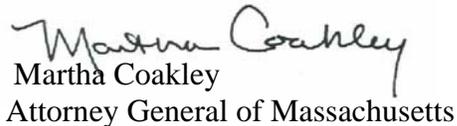
Hon. James F. Ports, Jr.
August 18, 2008
Page 13

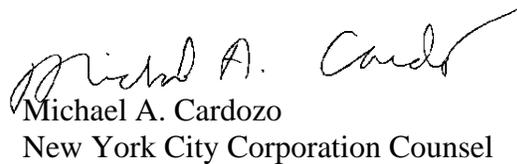
impact of the CAFE rulemaking, coupled with other anticipated actions affecting GHG emissions, and does not enable either the Agency or the public to determine whether the proposed CAFE rule does its part to enable us to achieve the significant energy savings generally recognized as necessary to prevent environmental disaster. We therefore urge NHTSA to comply with its duties under NEPA and to issue a new DEIS that corrects the deficiencies in the existing document.

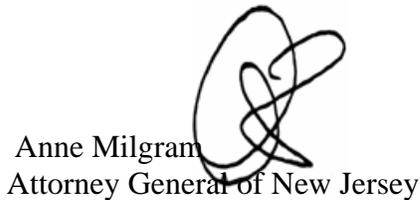
Sincerely,

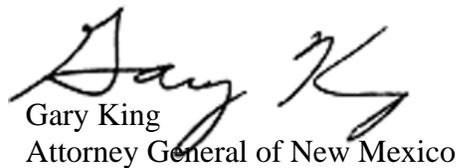

Edmund G. Brown Jr.
Attorney General of California

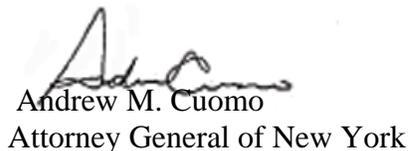

Joseph R. Powers, Acting Secretary
Commonwealth of Pennsylvania
Department of Environmental Protection

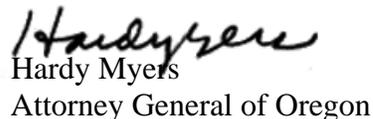

Martha Coakley
Attorney General of Massachusetts


Michael A. Cardo
New York City Corporation Counsel


Anne Milgram
Attorney General of New Jersey


Gary King
Attorney General of New Mexico


Andrew M. Cuomo
Attorney General of New York


Hardy Myers
Attorney General of Oregon

Attachments

1. Letter from state attorneys general, state agencies, and municipalities dated May 27, 2008
2. Letter from state attorneys general, state agencies, and municipalities dated July 1, 2008