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Public Policy Center

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General Motors Corporation respectfully submits these comments in response to the invitation in U.S. EPA's request for public comments (66 FR 57456) on the "2001 U.S. Climate Action Report." The 2001 U.S. Climate Action Report provides a comprehensive and objective overview of U.S. national circumstances, and in-depth descriptions of U.S. efforts to address concerns about climate change. As noted in the Report, the U.S. has many efforts underway to address climate change and much progress is being made in reducing the carbon intensity of the U.S. economy. This progress will continue with the sound policies and new initiatives the Administration has announced for addressing climate change in the years and decades ahead.

Most importantly, the U.S. has set forth a set of sound principles for effective public policy that will guide the long-term, global efforts that are needed to meet growing worldwide demands for energy, promote economic growth, and protect the global environment.

Effective policies for addressing concerns about global climate change, as noted in the Report, must be long-term, global, and flexible to respond to improved scientific understanding of the climate system, new measurement data, and the projections of more accurate forecasting models. Utilizing market incentives to promote voluntary efforts will prove vastly more effective than short-term mandates that generate far more costs than benefits, and only deter the sustained, high-risk efforts that are essential to addressing the long-term challenges of climate change. Also, as indicated in the Report, Carbon sequestration and capture and storage technologies should also be developed and implemented to offset greenhouse gas emissions.

Promoting essential global action through bi-lateral agreements and assistance programs, advancing scientific knowledge through the Climate Change Research Initiative, and promoting technological innovation through the Climate Change Technology Initiative provide a solid foundation for actions to address climate change.

Studies by the Business Roundtable (see attachments) and other organizations conclude that promoting the development, implementation and global diffusion of advanced energy technologies are the most effective responses to concerns about climate change. In the motor vehicle industry, the

development of the hydrogen transportation system is certainly the most effective response to climate change. While the auto companies are developing hydrogen fuel-cell vehicles, complementary research efforts are needed on the supporting infrastructure and on "clean" methods for producing hydrogen.

At various places, important discussions of climate change science in the Report draw on prior work that is either not supported or has been heavily criticized. In particular, we note that climate science is discussed in two places in the draft "2001 U.S. Climate Action Report." The first place is in chapter 1 beginning on page 3. This section is adapted from *Climate Change Science: An Analysis of Some Key Questions* (NRC, 2001). The first paragraph of this section states that human activities are causing the surface temperature to rise. While this statement is based on a similar statement that appears in the summary of the NRC report, it is noteworthy that there is nothing in that report itself which amplifies or justifies the comment. It does not appear in the report proper, written by the NRC Committee on the Science of Climate Change.

Our concern is that, while there is agreement that the concentration of CO<sub>2</sub> in the atmosphere has increased due to man's activities and that the global surface temperature has increased over the last century, the degree to which the CO<sub>2</sub> increase has affected this temperature increase remains unknown. This is an important distinction – and one which the Report should continue to convey.

The second place climate science is discussed is in chapter 6 from pages 1 to 29. This discussion focuses on the predicted impacts of climate change in the U.S. and is based on the 2000 national assessment, *Climate Change Impacts on the United States* which was prepared and released by the Clinton Administration prior to the 2000 election. The impacts on the U.S. were based on Global Climate Model (GCM) runs to the year 2100 using the Canadian (CGCM) and United Kingdom (Hadley) models. The scientific community has been highly critical of the assessment as a whole, and, in particular, the use of the GCMs to predict regional impacts. These criticisms are summarized in the comments that were submitted to the Office of the U.S. Global Change Research Program in August 2000. Particularly pertinent comments are found in the references listed below. Copies of these references are attached for your review.

Jacoby, H. D. and Prinn, R. G., *Review of Climate Change Impacts on the United States: Overview (Public Review Draft, June 2000)*, Massachusetts Institute of Technology Joint Program on the Science and Policy of Global Change, Cambridge, MA, Aug. 30, 2000.

Legates, D. R., *Climate Models and the National Assessment*, George C. Marshall Institute, Washington, DC, August 2000.

Kelly, G., *Comments to Office of the U.S. Global Change Research Program*, Global Climate Coalition, Washington, DC, August 8, 2000.

Wojick, D. E., *The National Scare: Assessing "The National Assessment of the Potential Consequences of Climate Change,"* Greening Earth Society, Washington, DC, April 4, 2000.

Wojick, D. E., *What the Experts Say about the USGCRP National Assessment Report,* Greening Earth Society, Washington DC, June 22, 2000.

Based on the comments in these references, the regional scenarios are at best very speculative and cannot be considered credible. The Report should reflect and acknowledge these shortcomings and consideration should be given to deleting these discussions in chapter 6. Instead, the text should reflect the uncertainty that exists concerning any projection of future climate, particularly regional impacts. In addition, scientific research should be continued to improve the understanding of the climate system, the regional impacts of potential increases in temperature, and the effectiveness of alternative policy actions.

Thank you for this opportunity to comment on this 2001 Climate Action Report. It is an extremely valuable reference, education, and communications document. Most importantly, it provides a policy framework for effective actions to address concerns about climate change. The emphasis on developing advanced energy technologies is absolutely correct. Technological innovation is at the core of both the success of the twentieth century and the promise of the twenty-first. It is easy to exaggerate the importance of technology in the short run, but difficult to overestimate it in the long run. If you have any questions, please feel free to call me, or if you have technical questions on the climate science, please call Dr. George Wolff at 313-665-2948.

Sincerely,

Terry E. Pritchett  
Director, Energy &  
Global Climate Issues Team

Attachments

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1. *The Role of Technology in Responding to Concerns About Global Climate Change*, The Business Roundtable, Washington DC, July 21, 1999. [www.brtable.org/document.cfm/302](http://www.brtable.org/document.cfm/302).
2. *Unleashing Innovation: The Right Approach to Global Climate Change*, The Business Roundtable, Washington DC, February 2001. [www.brtable.org/document.cfm/524](http://www.brtable.org/document.cfm/524).
3. Jacoby, H. D. and Prinn, R. G., *Review of Climate Change Impacts on the United States: Overview (Public Review Draft, June 2000)*, Massachusetts Institute of Technology Joint Program on the Science and Policy of Global Change, Cambridge, MA, Aug. 30, 2000.
4. Legates, D. R., *Climate Models and the National Assessment*, George C. Marshall Institute, Washington, DC, August 2000. [www.marshall.org/Legatesclimatemodels.htm](http://www.marshall.org/Legatesclimatemodels.htm)
5. Kelly, G., *Comments to Office of the U.S. Global Change Research Program*, Global Climate Coalition, Washington, DC, August 8, 2000.
6. Wojick, D. E., *The National Scare: Assessing "The National Assessment of the Potential Consequences of Climate Change,"* Greening Earth Society, Washington, DC, April 4, 2000.
7. Wojick, D. E., *What the Experts Say about the USGCRP National Assessment Report*, Greening Earth Society, Washington DC, June 22, 2000. [www.greeningearthsociety.org/Articles2000/scare1](http://www.greeningearthsociety.org/Articles2000/scare1).