

CEQ 21



April 24, 2003

Mr. Chris Hoff  
Director, Planning Staff  
Office of Planning, Analysis, and Accountability (A-2723)  
Office of the Chief Financial Officer  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460-0001

RE: 2003 Strategic Plan – March 5, 2003 Draft

Dear Mr. Hoff:

The Alliance of Automobile Manufacturers (Alliance) is a coalition of ten car and light-duty truck manufacturers. Alliance member companies have approximately 620,000 employees in the United States, with more than 250 facilities in 35 states. Our members represent more than 90 percent of U.S. vehicle sales.

The following comments are in response to EPA's solicitation of comments on the 2003 Strategic Plan (March 5, 2003 draft). These comments supplement those submitted by the National Association of Manufacturers.

We are writing to call your attention to an organizational change from the prior draft of this document. In developing the current draft, EPA moved the discussion of atmospheric change from a separate section of the Strategic Plan into the section covering "Goal 1: Clean Air." We believe that this organizational change is not appropriate and only serves to promote greater confusion among the public about the nature of Greenhouse Gas (GHG) emissions. We recommend that the discussion of atmospheric change be separated from the discussion of air pollution and restored to a separate section of the Strategic Plan.

The discussion of Goal 1 begins with an overarching statement of the goal: "Protect and improve the air so it is healthy to breathe and free of levels of *pollutants* that harm human health or the environment." (Emphasis added.) The first paragraph of this section notes that "*air pollution* can be transported great distances and across international boundaries." (Emphasis added.)

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As you know, the concern over GHGs is not that they cause "air pollution" by concentrating in localized areas and contributing to health effects or environmental damage. As a result, establishing an "ambient air quality standard" for greenhouse gases would be meaningless. Unlike most "air pollutants," GHG emissions are largely a function of energy usage, and the primary mechanism for reducing GHG emissions is to reduce energy usage.

There is already considerable confusion among the general public and the media about the nature and effects of greenhouse gases. Media sources often intermingle a discussion of greenhouse gases into stories about air pollution, or vice versa, in a way that demonstrates a fundamental misunderstanding of the differing nature of these issues. It does a disservice for EPA to reinforce this confusion by blurring the distinction between these issues in its Strategic Plan.

The introductory discussion of Goal 1 also states that EPA "will use regulatory, market-based, and voluntary programs to protect human health, global environments, and ecosystems from the harmful effects of ozone depletion and climate change..." By grouping ozone depletion and climate change in this way, the Strategic Plan implies that EPA has *regulatory* authority to address both issues. This, of course, is incorrect.

President Bush has stated publicly that he does not believe that one GHG, carbon dioxide, is a Clean Air Act "pollutant."<sup>1</sup> The President's position with respect to EPA's Clean Air Act authority is well-grounded in the law. The issue of EPA's authority to regulate GHGs under the Clean Air Act was discussed in our May 2001 response to a 1999 "Petition to Control Greenhouse Gas Emissions from New Motor Vehicles." At that time, the Alliance contacted Professor Arnold W. Reitze, Jr., a well-known legal scholar and the J.B. and Maurice C. Shapiro Professor of Environmental Law at the George Washington University Law School, and asked him to review the petition. Professor Reitze is the author of four books on environmental law, including a treatise on "Air Pollution Law," published in 1995, as well as author or co-author of over forty research studies and articles on environmental law. In addition, he is the faculty editor of *The Environmental Lawyer*, a joint George Washington University Law School and American Bar Association law review. We asked Professor Reitze to examine the issues in depth. His analysis is attached.

Professor Reitze concluded, among other things, that 1) EPA has never determined that GHGs are "air pollutants" as that term is defined under the Clean Air Act; 2) the Clean Air Act and the legislative history indicate that the term "air pollutants" was never intended to encompass GHGs; and 3) that EPA does not have regulatory authority to control GHG emissions.

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<sup>1</sup> Correspondence from President George W. Bush to Hon. Chuck Hagel, March 13, 2001, <http://www.whitehouse.gov/news/releases/2001/03/20010314.html>. Administrator Whitman is also reported to have made a similar statement. See "Lawsuit Filed to Force EPA to Regulate Greenhouse Gases from Mobile Sources," *BNA Daily Environment Reporter*, December 6, 2002.

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In order to clarify EPA's position and avoid further confusion, we suggest that Objective 1.3 be placed -- once again -- under a separate goal that does not imply a finding that GHGs are Clean Air Act "air pollutants" or that EPA has regulatory authority in this area.

We appreciate the opportunity to provide input and hope you find our comments helpful as you work to complete the Strategic Plan.

Sincerely,

A handwritten signature in cursive script that reads "Gregory J. Dana" followed by a smaller signature "by JCB".

Gregory J. Dana  
Vice President  
Environmental Affairs

Enclosure

cc: Jeff Holmstead  
Assistant Administrator for Air & Radiation, EPA

Hon. James L. Connaughton  
Chairman, CEQ

May 23, 2001

**RESPONSE TO 1999 PETITION TO EPA TO  
CONTROL GREENHOUSE GAS EMISSIONS  
FROM NEW MOTOR VEHICLES**

By: Professor Arnold W. Reitze, Jr.  
The George Washington University Law School  
Washington, D.C.

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Professor Arnold W. Reitze, Jr. is the J.B. and Maurice C. Shapiro Professor of Environmental Law at The George Washington University Law School. He has directed the environmental law program since 1970. Professor Reitze has been a consultant on environmental law to government, industry and nonprofit organizations for more than thirty-five years. He is the author of five books on environmental law including the treatises "Air Pollution Law" and "The Law Of Air Pollution Compliance and Enforcement." Professor Reitze has authored or coauthored more than fifty research studies and legal articles and is the faculty editor of The Environmental Lawyer, a joint George Washington University Law School and American Bar Association

law review.

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Appendix – The International Legal Response to Global Warming

## I. Introduction

Since the late 1970s the United States has been involved in efforts to control emissions of greenhouse gases (GHGs). This has led to various international agreements and domestic laws at the national level to reduce GHGs. Nevertheless, no program in the United States has been created that imposes binding requirements or enforceable mandates to reduce GHGs. While the federal government in general, and the Environmental Protection Agency (EPA) in specific, are not directly regulating GHGs, the issue has been raised as to whether the EPA has the authority to regulate GHGs.

On April 10, 1998, the General Counsel of EPA, Jonathan Z. Cannon, provided a memorandum to the EPA's Administrator concerning the Agency's authority to regulate four substances, including carbon dioxide (CO<sub>2</sub>), emitted from electric power plants. He asserted that CO<sub>2</sub> "falls within" the "broad" definition of "air pollutant" found in the Clean Air Act's (CAA's) section 302(g), but he did not make a determination for EPA that CO<sub>2</sub> is an air pollutant. The regulation of an air pollutant under the various programs in the CAA, including mobile source emission controls, is linked to a subsequent determination by the Administrator that the air pollutant has actual or potential harmful effects on public health, welfare, or the environment. Mr. Cannon concluded that "while CO<sub>2</sub> emissions are within the scope of the EPA's authority to regulate, the Administrator has made no determination to date to exercise that authority under the specific criteria" for regulation under one or more provisions of the CAA.<sup>1</sup>

On October 6, 1999, the EPA's then General Counsel, Gary S. Guzy, in testimony before Congress, stated that EPA actions to regulate CO<sub>2</sub> under the CAA, or other domestic law, would not be an effort to implement the Kyoto Protocol.<sup>2</sup> He embraced the earlier position of Mr. Cannon that CO<sub>2</sub> "falls within" the definition of air pollutant under the CAA, but before it can be regulated a finding is required by the Administrator that the pollutant meets the prerequisites imposed by the CAA. He noted that regulation as a criteria pollutant could be based on impacts on welfare resulting from a pollutant in the ambient air that comes from numerous or diverse **mobile** (emphasis added) or stationary sources. He added that since 1970 an effect on climate is a factor to be considered in determining whether welfare is endangered. Mr. Guzy went on to say that Congress' decision in 1990 not to adopt additional provisions to regulate GHGs did not limit the EPA's pre-existing power to regulate any air pollutant that meets the statutory criteria for regulation. He ended by reiterating one of the central conclusions of Mr. Cannon's memorandum, which was that the "EPA has not made any of the Act's threshold findings that would lead to regulation of CO<sub>2</sub> emissions from ... any source." But, he went on to say that "CO<sub>2</sub> is in the class of compounds that could be subject to several of the Clean Air Act's regulatory approaches." Mr. Guzy's position was reiterated on December 1, 1999, in a letter to Congressman McIntosh, where he stated the EPA could regulate CO<sub>2</sub> under the CAA. He also stated that the language in sections 103(g) and 602(e), where carbon dioxide is

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<sup>1</sup> U. S. Env'tl. Protection Agency, EPA Authority to Regulate Pollutants Emitted by Electric Power Generation Sources, Memo from Jonathan Z. Cannon, General Counsel (Apr. 10, 1998).

<sup>2</sup> Testimony of Gary S. Guzy, General Counsel, U.S. Env'tl. Protection Agency, before a joint hearing of the Subcommittee on National Economic Growth, Natural Resources and Regulatory Affairs of the Committee on Government Reform and the Subcommittee on Energy and Environment of the Committee on Science, U.S. House of Representatives, October 6, 1999 at <http://www.epa.gov/ocirpage/hearings/testimony/100699gg.htm>.

mentioned, "does not limit in any way the regulatory authority provided by other provisions of the Clean Air Act."<sup>3</sup> The EPA's position in 1999, according to Messers. Cannon and Guzy, was that CO<sub>2</sub> falls within the definition of an "air pollutant" and, therefore, may be regulated under the CAA if the Agency makes the necessary additional findings. To date, EPA has not made such findings: indeed, the statements of Cannon and Guzy may no longer reflect the position of EPA.

On October 20, 1999, twenty petitioners filed a "PETITION FOR RULE MAKING AND COLLATERAL RELIEF SEEKING THE REGULATION OF GREENHOUSE GAS EMISSIONS FROM NEW MOTOR VEHICLES UNDER SECTION 202 OF THE CLEAN AIR ACT." The petitioners are led by the International Center for Technology Assessment and are joined by environmentalists and "soft-energy" profit and non-profit organizations. The petitioners' text runs about twenty-four pages, but the legal arguments comprise only a few pages. There is not much analysis in the petition, but it does claim that the Cannon Memorandum of April 10, 1998, which is discussed above, is "a legal determination that CO<sub>2</sub> meets the definition [of air pollutant] contained in § 302(g)." Again citing the Cannon Memorandum, it also claims that "Congress explicitly recognized CO<sub>2</sub> emissions as an air pollutant under § 103(g) of the Clean Air Act."<sup>4</sup> The crux of the petitioners' argument is that GHGs are pollutants under CAA section 302(g) that endanger public health or welfare and, therefore, must be regulated under section 202(a)(1). The remainder of the Petition deals with the alleged harm caused by GHGs in an effort to show that the requirements of section 202(a)(1) have been met so that a finding of endangerment to public health or welfare should be made by the EPA.

The position advanced by the International Center For Technology Advancement does not withstand scrutiny, as it depends on an inappropriately narrow reading of the CAA. Their position is easily refuted by using a holistic evaluation of the entire governmental effort aimed at dealing with GHGs. The wider the scope of analysis, the weaker the arguments of the petitioners become. Part II of this memorandum will discuss the applicability of CAA subchapter II to the regulation of GHGs. Part III will evaluate the applicability of the CAA's subchapters I and VI, as well as other relevant statutes, to address the issue of whether GHGs from mobile sources can be regulated under these CAA subchapters. Part IV will address whether the EPA has a mandatory duty to regulate GHGs. Part V concludes that the EPA has no legal authority to regulate GHGs, and even if it has such authority there are compelling reasons for the Agency not to regulate GHGs. An appendix evaluates the international efforts to date.

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<sup>3</sup> Letter from Gary S. Guzy to Congressman David M. McIntosh, Chairman, Subcommittee on National Economic Growth, Natural Resources and Regulatory Affairs, Committee on Government Reform, U.S. House of Representatives (Dec. 1, 1999).

<sup>4</sup> Petition at 11. CAA § 103(g) provides the EPA with authority to research and develop nonregulatory strategies to prevent pollution. Carbon dioxide from stationary sources is a substance listed for this effort.

## II. Subchapter II of the CAA Does Not Authorize EPA to Regulate GHGs from Mobile Sources

### A. EPA Has Made No Determination That CO<sub>2</sub> or Any Other GHGs are Air Pollutants.

The CAA gives the EPA the authority to regulate a substance if it is (1) an air pollutant and (2) a danger to public health or welfare or the environment under one of the statute's regulatory provisions.<sup>5</sup> Thus, the starting point for an analysis is the CAA's definition of "air pollutant" found in section 302(g).<sup>6</sup> The statute says "[t]he term 'air pollutant' means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive... substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant..." The EPA has indicated that this definition includes some GHGs. Mr. Cannon, in his opinion discussed in the introduction to this memorandum, gave his view that a substance can be an air pollutant even if it has no harmful effect on public health, welfare or the natural environment. He added that a substance can be an air pollutant even if it is naturally present in the ambient air. "For example, SO<sub>2</sub> is emitted from geothermal sources; volatile organic compounds (precursors to ozone) are emitted by vegetation, and particulate matter and NO<sub>x</sub> are formed from natural sources through natural processes, such as naturally occurring forest fires."<sup>7</sup> If CO<sub>2</sub> is a pollutant under the CAA, then other GHGs presumably also would be pollutants. They also enter, or have the potential to enter, the ambient air, which is defined as "that portion of the atmosphere, external to buildings, to which the general public has access."<sup>8</sup>

The 1970 legislation amended section 302 of the 1967 version of the CAA to, among other things, add a new subsection (g), substituting the words, "air pollutant" for "substance" without defining that term. The definition of that term was first added as part of the 1977 amendments to the CAA to mean "any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air." That definition was amended again in 1990 to add the second sentence of the definition as we know it today that adds precursors to the definition of air pollutants.

The Petitioners, citing a footnote about unrelated sections 165 and 169 of the CAA in *Alabama Power Co. v. Castle*,<sup>9</sup> say that the courts have "interpreted" section 302(g) "in an extremely broad manner"

<sup>5</sup> 42 U.S.C. §§ 7401-7671g.

<sup>6</sup> 42 U.S.C. § 7602(g).

<sup>7</sup> U.S. Env'tl. Protection Agency, EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources, Memo from Jonathan Z. Cannon, General Counsel (Apr. 10, 1998). This was reiterated on October 6, 1999 in testimony of the EPA's General Counsel Gary S. Guzy, before a joint hearing of the Subcommittee on National Economic Growth, Natural Resources and Regulatory Affairs of the Committee on Government Reform and the Subcommittee on Energy and the Environment of the Committee on Science, U.S. House of Representatives, Oct. 6, 1999 at <http://www.epa.gov/ocipage/testimony/100699gg.htm>. His position was repeated in Correspondence from Gary S. Guzy to Rep. McIntosh, Chairman, Subcommittee on National Economic Growth, Natural Resources and Regulatory Affairs of the Committee on Government Reform, U.S. House of Representatives, Dec. 1, 1999.

<sup>8</sup> 40 C.F.R. § 50.1(e)

<sup>9</sup> 636 F.2d 323, 353 (D.C. Cir. 1979).



and contend that the greenhouse gas emissions identified by them for regulation meet this "broad statutory definition." Clearly, the definition is broad, but it is also ambiguous.

The threshold consideration for regulating is whether GHGs generally and CO<sub>2</sub> in particular are air pollutants. The CAA applies only if the substance is an "air pollution agent or combination of such agents." The CAA's section 302(g) does not clearly define the terms "air pollution" or "air pollution agents," but merely gives some examples of what substances or matters might qualify. The threshold is not self-executing. Therefore, whether or not a particular substance falls within the terms of the definition must be determined through an administrative process. Presumably that would happen in a public process that at least gives notice and explains the basis for the determination.

More recently, the new Administration, in a March 13, 2001 letter by President Bush to several Senators, stated that the CO<sub>2</sub> "is not a 'pollutant' under the Clean Air Act."<sup>10</sup> His statement recognizes that CO<sub>2</sub> has never been commonly understood to be an "air pollutant" because it does not create air quality problems.

The Petitioners assert that not only has there been a legal determination that CO<sub>2</sub> meets the definition, but that CH<sub>4</sub> "should be considered an 'air pollutant'," and that HFCs are a "powerful greenhouse gas" that meet the definition. The petition is silent concerning N<sub>2</sub>O. As to the so-called "legal determination," the Petitioners refer to EPA's former General Counsel's April 10, 1998 memorandum to the Administrator.<sup>11</sup> However, that memorandum was not a determination by the Administrator that CO<sub>2</sub> is an air pollutant. Mr. Cannon merely opined to the Administrator that CO<sub>2</sub> "falls within" the "broad definition" of section 302(g) of the CAA and therefore "CO<sub>2</sub> emissions are within the scope of the EPA's authority to regulate." It was merely an opinion offered to the Administrator. It did not undergo a public process and to our knowledge the Administrator has not delegated the authority to make such a determination to the General Counsel. As to CH<sub>4</sub>, N<sub>2</sub>O and HFCs, there is nothing even resembling a determination by the EPA that they are "air pollution agents" for purposes of the definition.

At the time Congress enacted subchapter VI covering stratospheric ozone depleting substances, Congress also listed several of the subchapter VI substances as "air pollutants" subject to section 112 of the CAA. One, for example, is carbon tetrachloride. Congress also gave the EPA authority to list under section 112, in the Administrator's discretion or pursuant to petitions, other substances, but only by rule in accordance with that section, which includes criteria for listing. However, the EPA did not designate CH<sub>4</sub>, N<sub>2</sub>O, or HFCs as air pollutants for purposes of section 112 or any other section of the CAA.

Nevertheless, in the process of developing the 1990 CAA Amendments, Congress considered regulating CO<sub>2</sub> emissions, as well as other GHGs, and then rejected the proposed legislation. The original Senate bill, S. 1630, had no GHG provisions except a motor vehicle tailpipe standard limiting CO<sub>2</sub>

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<sup>10</sup> The White House, Office of the Press Secretary, Text of a letter from the President to Senators Hagel, Helms, Craig, and Roberts (Mar. 13, 2001).

<sup>11</sup> See *supra* note 1

emissions.<sup>12</sup> When S. 1630 emerged from committee it contained a Title VII entitled the "Stratospheric Ozone and Climate Protection Act." The bill includes language that stratospheric ozone depletion and global climate change were occurring due to emissions of CFCs, HCFCs, methane and carbon dioxide that imperil human health and the environment and, therefore, should be controlled.<sup>13</sup> Title VII of the bill was based on another bill, S. 491, entitled the Stratospheric Ozone and Climate Protection Act of 1989, which had been introduced by Senators Chafee and Baucus.<sup>14</sup> S. 491 was based on a similar bill, S. 571, that had been introduced by Senator Chafee in the previous Congress.<sup>15</sup> The legislation included as a national goal the reduction, to the maximum extent possible, of gases produced by human activities that were likely to affect adversely the global climate, and it provided for an orderly shift to alternative technologies.<sup>16</sup> This bill would have allowed the Administration to regulate manufactured substances that contributed to climate modification.<sup>17</sup>

As noted, the Senate Committee on Environmental and Public Works, in reporting S.1630 to the full Senate, included a Title VII. It added a proposed new section to subchapter II of the CAA, which would have specifically required the EPA to set standards for CO<sub>2</sub> emissions from light duty vehicles beginning in model year 1996.<sup>18</sup> In commenting on that provision, the late Senator John Chafee said: "The bill requires that emissions of carbon dioxide from cars be regulated under the Clean Air Act."<sup>19</sup> However, this provision was rejected by the full Senate, which adopted a substitute amendment No. 1293 for the bill reported by the committee that then passed the Senate without this provision.<sup>20</sup>

The final version of the 1990 CAA Amendments also amended section 103(g)(1) of the CAA to insert the words "carbon dioxide" as an added substance to be considered as part of the EPA's "basic engineering research and technology program to develop, evaluate and demonstrate non-regulatory strategies and technologies for air pollution prevention." As in all other enactments beginning in the 1970s, Congress again chose the non-regulatory approach to climate change and greenhouse gases. By way of emphasis, the words "non-regulatory" appear several times in section 103 and in a sentence that expressly prohibits reliance on the section for regulatory purposes.

In the House of Representatives, in 1989, Congressmen Dingell and Lent introduced H.R. 3030, which was destined to be the primary source of the 1990 CAA Amendments.<sup>21</sup> The bill as introduced had

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<sup>12</sup> S. 1630, § 206 (1990).

<sup>13</sup> S. 1630, § 501 (1990).

<sup>14</sup> S. Rep. No. 228, 101st Cong., 1st Sess. (1989), at 385.

<sup>15</sup> *Id.*

<sup>16</sup> *Id.* at § 502(a).

<sup>17</sup> EPA has defined "manufacture" under the Toxic Substance Control Act, 40 C.F.R. § 720.3(r)(2) to include by-products or substances produced "coincidentally" with the manufacture of the primary substance. Arguably the right to control manufactured substances would have included the right to regulate associated CO<sub>2</sub> emissions. National Mining Association memo of Oct. 12, 1998, at 36, fn. 88.

<sup>18</sup> See S. Rep. No. 228, 101<sup>st</sup> Cong., 1<sup>st</sup> Sess., at 98-100, 644 (Dec. 20, 1989).

<sup>19</sup> A Legislative History of CAA Amendments of 1990, at Vol. IV, 4844 ( Sen. Print 103-38).

<sup>20</sup> *Id.* at Vol. V, 7339.

<sup>21</sup> H.R. 3030, 101st Cong., 1st Sess., 135 Cong. Rec. 16563 (1989).

no provisions concerning either stratospheric ozone depletion or global warming.<sup>22</sup> Subsequently, a stratospheric ozone title was introduced on the House floor as an amendment by Representative Dingell.<sup>23</sup> The Dingell amendment, which was closer to the 1990 CAA Amendments than the Senate version, was limited to stratospheric ozone depletion and did not deal with global warming or carbon dioxide. It did not include greenhouse gases among the substances to be regulated.<sup>24</sup> In the process of enacting Title VI of the 1990 CAA Amendments, dealing with stratospheric ozone, language was incorporated from both the House and Senate versions.<sup>25</sup> But, all references to GHGs, including CO<sub>2</sub>, were removed except for a reference in section 602(e). This section says, "the Administrator shall publish the global warming potential of each listed [ozone depleting] substance. The preceding sentence shall not be construed to be the basis of any additional regulation under this chapter."<sup>26</sup> Title VI of the 1990 CAA Amendments, thus, did not include any provision to regulate GHGs.

This is strong evidence the Congress did not intend to regulate GHGs when it considered ozone-depleting substances and GHGs in the same sections of the pending legislation. A basic rule of statutory construction is that silence by Congress after considering a proposal cannot be the basis for claiming Congressional authorization.<sup>27</sup> "The Court of Appeals, will not presume a delegation of power based solely on the fact that there is not an express withholding of such power."<sup>28</sup> "In the normal case Congress is assumed to be conscious of what it has done, especially when it chooses between two available terms that might have been included in the provision in question."<sup>29</sup>

#### **B. Nothing in the Legislative History of the CAA Indicates that Congress Was Concerned About Global Warming.**

The legislative history of the 1990 CAA Amendments demonstrates that GHGs are not pollutants for the purposes of subchapter II, but even if they were pollutants, section 202(a)(1) requirements also must be met before the EPA may regulate them. This section grants the Administrator the power to regulate "any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger health or welfare."<sup>30</sup>

Welfare is defined in CAA section 302(h).<sup>31</sup>

All language referring to effects on welfare includes, but is not limited to, effects on soils,

<sup>22</sup> H. Rep. No. 101-490, 101st. Cong., 2d Sess., Parts 1-2 (1990).

<sup>23</sup> 136 Cong. Rec. 11,964 (1990).

<sup>24</sup> 136 Cong. Rec. 11,965 (1990).

<sup>25</sup> H.R. Conf. Rep. No. 952, 101st Cong., 2d Sess. 335 (1990).

<sup>26</sup> CAA § 602(e), 42 U.S.C. 7671a(e).

<sup>27</sup> *INS v. Cardozo-Fonsecc*, 480 U.S. 421, 442-43 (1987).

<sup>28</sup> *Am. Petroleum Inst. v. EPA*, 52 F.3d 1113, 1118 (D.C. Cir. 1995) citing *Ethyl Corp. v. EPA*, 51 F.3d 1053, 1060 (D.C. Cir. 1995). See also *Nat'l Mining Ass'n v. Dep't of the Interior*, 105 F.3d 691, 695 (D.C. Cir. 1997).

<sup>29</sup> *Am. Petroleum Inst. v. EPA*, 198 F.3d 275 (D.C. Cir. 1999). See also *Gen. Motors Corp. v. U.S.*, 496 U.S. 530, 538-39 (1990); *Russello v. United States*, 464 U.S. 16, 23 (1983).

<sup>30</sup> 42 U.S.C. § 7521(a)(1).

<sup>31</sup> 42 U.S.C. § 7602(h).

water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.

When dealing with EPA's power to regulate GHGs because of their effect on welfare, the Cannon memo focused on the word "climate." The term climate did not appear in the definition of welfare in the Air Quality Act of 1967.<sup>32</sup> The definition of "effects on welfare" found in CAA section 302(h)<sup>33</sup> was added by the CAA Amendments of 1970,<sup>34</sup> except for the last clause, "whether caused by transformation, conversion, or combination with other air pollutants."<sup>35</sup> This last clause was added by section 109 of the 1990 CAA Amendments.<sup>36</sup> A review of the legislative history of the 1970 CAA Amendments reveals no Congressional concern or discussion concerning global warming.<sup>37</sup> Within the Executive Branch, only the possibility of global warming was the subject of discussion at the time.<sup>38</sup> A few years later there still seemed to be no concern for global warming issues. For example, a Senate report on automobile emission standards published in October 1973 had no discussion of global warming issues.<sup>39</sup> Thus, it is fair to

<sup>32</sup> The Air Quality Act of 1967, Pub. L. No. 90-148, 81 Stat. 485, provided in section 302(g) "All language referring to adverse effects on welfare shall include but not be limited to injury to agricultural crops and livestock damage to and the deterioration of property and hazards to transportation." Climate was listed along with meteorology and topography as parameters to be considered in establishing atmospheric areas pursuant to CAA § 107. See Conference Report to accompany S. 780, 90th Cong., 1st Sess., Rep. No. 916, 7 (Nov. 13, 1967).

<sup>33</sup> 42 U.S.C. § 7602(h).

<sup>34</sup> The language appears in the senate bill S. 4358 in section 110(b) dealing with national air quality goals which were to protect the public health and welfare from "adverse effects on soils, water, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, as well as effects on economic values." See A Legislative History of the Clean Air Act Amendments of 1970, 93d. Cong., 2d Sess., Vol. 1, at 543 (January 1974) [Serial No. 93-18]. The Report of the Committee on Public Works, National Air Quality Standards Act of 1970, 91st Cong., 2d Sess., at 11 (Sept. 17, 1970) [Report No. 91-1196], has no explanation beyond repeating the statutory language. See Legislative History, *id.*, at 411. After the bill was sent to the conference committee and ultimately enacted the language quoted in the text was added in section 15(a)(1) of the reported bill as changes to CAA section 302. Conference Report, Clean Air Amendments of 1970, 91st Cong., 2d Sess., (1970) [Report No. 91-1783]. See Legislative History, *id.*, at 187. This was the way it was enacted in Pub. L. No. 61-604. See Legislative History, *id.* at 101.

<sup>35</sup> 42 U.S.C. § 1857h (1971).

<sup>36</sup> Pub. L. No. 101-549, § 109 (1990).

<sup>37</sup> A Legislative History of the Clean Air Amendments of 1970, *supra* note 34.

<sup>38</sup> THE FIRST ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL QUALITY 95 (Aug. 1970) reported that carbon dioxide emissions may increase the earth's surface temperature. But it concluded that "[a]ny attempt to extrapolate the future effect of carbon dioxide on climate must be uncertain because the function of carbon dioxide that will enter the ocean is unknown." *Id.* at 96. The report continued with a discussion of particulate pollution which may "accelerate temperature drops - and thus help compensate for any carbon dioxide-generated temperature rise. . . ." *Id.* at 97. The report continues to discuss a recent cooling trend and mentions the possibility of air pollution bringing a return of an ice age. *Id.* at 98.

In 1970 a study required by CAA section 211(a) of the Air Quality Act of 1967 concerning the need for national emission standards for stationary standards was prepared for Congress by the Secretary of Health, Education and Welfare. Senate Documents, 91st. Cong., 2d Sess. Vol. 1-1, Miscellaneous. Senate Document No. 91-63, March 1970. The thrust of the report was "that man may be changing his environment." *Id.* at 74. But there is no specific mention of global warming or the effects of GHGs.

<sup>39</sup> The Impact of Auto Emission Standards, Report of the Staff of the Subcommittee on Air and Water Pollution to the Committee on Public Works, United States Senate, 93d. Cong., 1<sup>st</sup>. Sess. (Oct. 1973) [Serial No. 93-11].

conclude that when Congress added climate to the list of welfare effects in 1970, it was not concerned with GHGs, global warming, or climate change.

Section 202(a)(1) alternatively allows an air pollutant to be regulated "which may reasonably be anticipated to endanger public health." The term "public health" is not defined in the statute. However, section 202(l) allows mobile source-related air toxics to be controlled to protect public health.<sup>40</sup> Section 202(l)(1) calls for a study of toxic air pollutants to be completed by May 15, 1992 for unregulated air pollutants associated with motor vehicles and motor vehicle fuels.<sup>41</sup> Section 202(l)(2) then provides for EPA to promulgate standards which "reflect the greatest degree of emission reduction achievable through the application of technology which will be available, taking into consideration the standards established under subsection (a) of this section, the availability and costs of the technology, and noise, energy, and safety factors, and lead time."<sup>42</sup> This statutory procedure appears to be the appropriate way to deal with any public health threat. The EPA published a list in 1998 of hazardous air pollutants emitted from on-road vehicles, and the list contained no GHGs; on March 29, 2001, EPA identified twenty-one hazardous air pollutants emitted by motor vehicles that will be evaluated by mid-2004 for potential additional controls, but the list contains no GHGs.<sup>43</sup> The Agency has developed an integrated urban air toxics strategy that addresses health risks from both stationary and mobile sources.<sup>44</sup> On September 14, 1998 the Agency released its draft Integrated Urban Air Toxics Strategy, and formally promulgated it on July 19, 1999.<sup>45</sup> This program is ongoing and capable of dealing with any public health problem created by mobile sources that Congress intended to have addressed.

**C. Substances Must Also Meet the Other Prerequisites of CAA Section 202 Before They Can Be Regulated by EPA.**

New motor vehicles have been subject to federal exhaust emission standards for hydrocarbons (HC) and carbons monoxide (CO) since Model Year (MY) 1968 and for nitrogen oxides (NO<sub>x</sub>) since MY 1973.<sup>46</sup> The 1970 CAA Amendments created the essentials of the program in use today.<sup>47</sup> The major thrust of the 1970 program was to reduce the exhaust emissions of HC, CO and NO<sub>x</sub> through a program provided in section 202(b).<sup>48</sup> That program, aimed at the control of the specified pollutants, continues today in section 202 with motor vehicles (referred to in the Act as "light-duty trucks" and "light-duty vehicles") subject to emission standards specified in section 202(g) and (h).<sup>49</sup> During the period from 1970

<sup>40</sup> 42 U.S.C. §7521(l).

<sup>41</sup> 42 U.S.C. § 7521(l)(1).

<sup>42</sup> 42 U.S.C. § 7521(l)(2).

<sup>43</sup> 66 Fed. Reg. 17,230 (Mar. 29, 2001); U.S. ENVTL. PROTECTION AGENCY, NATIONAL AIR QUALITY AND EMISSIONS TRENDS REPORT, 1997, 74, (Dec. 1998) [454/R-98-016].

<sup>44</sup> *Id.* at 80.

<sup>45</sup> Draft Integrated Urban Toxics Strategy To Comply With Section 112(d), 112(c)(3) and Section 202(l) of the Clean Air Act; Notice, 63 Fed. Reg. 49,239 (Sept. 14, 1998); National Air Toxics Program: The Integrated Urban Strategy; Notice, 64 Fed. Reg. 38,705 (July 19, 1999).

<sup>46</sup> FRANK GRAD et al., THE AUTOMOBILE AND THE REGULATION OF ITS IMPACT ON THE ENVIRONMENT 119 (1975),

<sup>47</sup> Pub. L. No. 91-604 (1970).

<sup>48</sup> *Id.* at § 202(b).

<sup>49</sup> 42 U.S.C. § 7521(g) & (h).

to 1990, the exhaust standards became more stringent. In addition to changes in the numerical values that mandated reduced emissions, other aspects of the program were subject to modification, but the program did not change in any fundamental way for twenty years.

Heavy-duty vehicles are subject to section 202(a)(3)(A) which regulates emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter.<sup>50</sup> The standards applicable to heavy-duty trucks may be revised by the Administrator, but revisions are limited to changes to standards promulgated under the CAA prior to the CAA Amendments of 1990.<sup>51</sup> Since GHGs, including CO<sub>2</sub>, were not regulated prior to 1990, the language of section 202 would preclude their regulation from heavy-duty vehicles. Other sections of the CAA also demonstrate that if Congress wants to add or subtract regulated pollutants it specifically provides appropriate authority to the Administrator.<sup>52</sup>

Traditional air pollutants from heavy duty vehicles, pursuant to CAA section 202, are to be regulated by standards that "reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology."<sup>53</sup>

The issue concerning GHGs is the extent to which presently unregulated substances from new motor vehicles, including GHGs, may be regulated under CAA section 202. Because of the extensive program to control emissions from new motor vehicles and the history of the implementation of section 202, whether the broad language of section 202(a) provides authority for adding additional pollutants is ambiguous.<sup>54</sup> The EPA's practice for the past thirty years has been to implement the pollutant-specific provisions of Subchapter II, and it has never regulated any other mobile source pollutants. Moreover, for section 202(a) to be utilized the Administrator would have to find that one or more GHGs are pollutants that "cause or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." Any regulation "shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period."<sup>55</sup> Thus it appears that for a GHG to be regulated there must be findings that (1) it is a pollutant, (2) it endangers public health or welfare, (3) adequate time is afforded to develop and apply appropriate control technology, (4) the technology is cost effective, and (5) appropriate time is provided to apply the technology. Such findings are discretionary on the part of the Administrator.

Section 202(b)(1)(C) limits the revision of an existing standard, and the numerical values specified in the statute cannot be modified before model year 2004.<sup>56</sup> This might preclude any new requirements

<sup>50</sup> 42 U.S.C. § 7521(a)(3)(A).

<sup>51</sup> CAA § 202(a)(3)(B), 42 U.S.C. § 7521(a)(3)(B).

<sup>52</sup> See e.g., CAA § 109, 42 U.S.C. § 7409 (criteria pollutants); CAA § 112(b)(2), 42 U.S.C. § 7412(b)(2) (hazardous air pollutants).

<sup>53</sup> CAA § 202(a)(3)(A)(i), 42 U.S.C. § 7521(a)(3)(A)(i).

<sup>54</sup> CAA § 202(a)(1), 42 U.S.C. § 7521(a)(1).

<sup>55</sup> CAA § 202(a)(2), 42 U.S.C. § 7521(a)(2).

<sup>56</sup> 42 U.S.C. § 7521(b)(1)(C).

involving tradeoffs that increase emissions of any regulated pollutants above existing requirements. Furthermore, section 202(a)(4)(A) prohibits the use of emission controls or designs that "cause or contribute to an unreasonable risk to the public health, welfare, or safety in its operation or function."<sup>57</sup> The term "unreasonable risk" is defined in section 202(a)(4)(B).<sup>58</sup>

The Administrator also has the authority to promulgate regulations to control mobile source air toxics.<sup>59</sup> The section requires a study to be completed showing a "need for, a feasibility of," controlling such emissions.<sup>60</sup> This study is discussed in Part III(b) of this memorandum, but it did not identify any GHGs that needed control. Moreover, any regulation of mobile source toxics requires that technology to control such pollutants be available after considering costs as well noise, energy, safety and lead time.<sup>61</sup>

#### **D. The Legislative History of CAA Section 202(a) Does Not Support Claims that Congress Addressed GHGs in Title II.**

The CAA, as we know it today, evolved through several enactments beginning with Public Law 159 of the 84th Congress of July 14, 1955, which authorized "research and technical assistance to air pollution control." The 1955 statute was completely rewritten when the first vestiges of a regulatory program was enacted on December 17, 1963 by Public Law 88-206, which also first named the new law the "Clean Air Act." In 1965, Public Law 89-272 amended the 1963 version, by dividing it into three "Titles." Title I was designated "Air Pollution Prevention and Control," "Title III was designated "General," and a new Title II, entitled "Control of Air Pollution from Motor Vehicles" was added, which was called the "Motor Vehicle Air Pollution Control Act." The CAA was once again amended in 1967 by Public Law 90-148 and Title II was given a new short title, namely the "National Emissions Standards Act," which remains its title today.

The 1965 version of the Act provided in section 202 (a) that the administrator of the CAA, who was at that time the Secretary of Health, Education and Welfare, "shall by regulation, giving appropriate consideration to technological feasibility and economic costs, prescribe as soon as practicable standards, applicable to the emission of any kind of substance, from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause or contribute to, or are likely to cause or to contribute to, air pollution which endangers the health or welfare of any persons, and such standards shall apply to such vehicles or engines whether they are designed as complete systems or incorporate other devices to prevent or control such pollution."

That provision, which was restated in the 1967 amendments, made no reference to any particular "substance," but left it entirely to the Secretary to determine, in his "judgment," what substances met the statutory test for regulation. Similarly, the new section 108 of the 1967 amendments to the CAA provided

<sup>57</sup> 42 U.S.C. § 7521(a)(4)(A).

<sup>58</sup> 42 U.S.C. § 7521(a)(4)(B).

<sup>59</sup> CAA § 202(l)(2), 42 U.S.C. § 7521(l)(2).

<sup>60</sup> CAA § 202(l)(1), 42 U.S.C. § 7521(l)(1).

<sup>61</sup> CAA § 202(l)(2), 42 U.S.C. § 7521(l)(2).

for the establishment by the Secretary of air quality standards and "atmospheric areas of the Nation." Such areas were to be established "on the basis of those conditions, including, but not limited to, climate meteorology and topography, which affect the interchange and diffusion of pollutants in the atmosphere."

However, by 1970 Congress became frustrated by the slow pace of regulation. For example, the House Committee on Interstate and Foreign Commerce (now the Commerce Committee) in reporting their version of the "Clean Air Act Amendments of 1970," said "While a start has been made in controlling air pollution since the enactment of the Air Quality Act of 1967, progress has been regrettably slow."<sup>62</sup>

While silent on section 202 of the CAA, that Committee's bill amended subchapter I of the Act requiring establishment of national ambient air quality standards "within 30 days after enactment. . . for any pollutant or combination of pollutants for which the Secretary has issued air quality criteria," saying that such criteria "have been issued" by the Secretary for five specified pollutants, namely sulfur dioxide, particular matter, carbon monoxide, hydrocarbons, and photochemical oxidants. The Senate Committee's report on the other hand stated that the "authority provided in section 202 (a) would continue to be available to establish standards for light duty motor vehicles," while adding new provisions setting a deadline for new vehicles to "meet emission standards established by the Secretary for air pollution agents for which emission standards were in effect" prior to the date of the enactment of the Senate's bill.<sup>63</sup> It also specified the percentage reductions the standards must "represent." The report added that it "is expected that section 202 (a) authority would be used for regulation of particulate emissions."<sup>64</sup>

The resulting conference between the House and Senate amended section 202 of the CAA to make clear what substances were to be regulated by adding a new subsection (b) and making that subsection an exception to subsection (a). In essence, the broad discretion of the 1967 version of the CAA to determine what substances were to be regulated was circumscribed by the clear Congressional directive for regulation of the substances specified in the statute. What was retained, then and now, by the Administrator of the EPA, as the 1970 successor to the Secretary of HEW, was the authority to prescribe the details of the regulation.

The policy of Congressional designation of substances to be regulated was continued in the 1977 and 1990 amendments to subchapter II of the CAA. In 1977, the Senate Committee on Environment and Public Works said:

The automobile pollution control program established under the Clean Air Act Amendments in 1965 required the Secretary of Health, Education, and Welfare to establish emission standards on the basis of technical and economic feasibility. By 1970, it had become apparent that progress under that yardstick was inadequate; that ambient levels of motor vehicle-related pollutants would not be brought down to the level necessary to protect human health at an early date; and voluntary technical development by the industry

<sup>62</sup> H. Rep. No. 91-1146, June 3, 1970.

<sup>63</sup> S. Rep. No. 91-1196, Sept. 17, 1970.

<sup>64</sup> *A Legislative History of the CAA Amendments of 1990*, supra note 19, at Vol. 1, 397, 424 and 502.



would not achieve emissions goals soon enough to respond to the public demand for clean air.

The Congress recognized that new vehicles in an auto-oriented society must meet very high standards of control. Therefore, the Clean Air Amendments of 1970 abandoned the "technical and economic feasibility" approach and adopted statutory standards and rigid timetables for achievement of those standards. The standards reflected that level of control needed to insure attainment of health-related air quality levels, according to calculations supplied by the National Air Pollution Control Administration in the Department of Health, Education, and Welfare.<sup>65</sup>

The emissions that Congress has specifically addressed in Subchapter II are: non-methane hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter. There is no mention in this Subchapter of any of the four GHGs listed by the Petitioner.

CAA section 202(a)(1) & (2), added by the Clean Air Act Amendments of 1970, have been changed only in minor ways. The language "which in his judgment causes or contributes to, if likely to cause or contribute to, air pollution endangers the public health or welfare;" found in the 1970<sup>66</sup> Amendments was changed to "which in his judgment cause or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare." This change occurred in 1977<sup>67</sup> and was not changed by the 1990 CAA Amendments. The rest of section 202(a)(1) & (2) remains as enacted in 1970.

### **III. Even for Stationary Sources, EPA's Authority to Regulate Greenhouse Gases Under CAA Subchapters I and VI Is Not Apparent.**

#### **A. The SIP-Based Program is Not Suited for GHG Regulation.**

If a substance meets the definition of "air pollutant" and enters the ambient air, additional analysis is required to determine if a regulatory program exists under the CAA that is applicable to a specified air pollutant. The CAA's most traditional program involves criteria air pollutants that must be controlled pursuant to a state implementation plan (SIP) which is normally developed and implemented by a state for each air quality control region (AQCR) within the state.<sup>68</sup> For this SIP-based program to commence, the EPA must designate a substance as a criteria pollutant pursuant to CAA §108 after finding that emissions "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare" and "the presence of which in the ambient results from numerous diverse **mobile** (emphasis added) or stationary sources."<sup>69</sup> Primary national ambient air quality standards (NAAQS) must be

<sup>65</sup> S. Rep. No. 95-127, at 68 (May 10, 1977); see similar comments by the House Committee on Interstate and Foreign Commerce, H. Rep. No. 95-294, at 231 (May 12, 1977).

<sup>66</sup> Pub. L. No. 91-604 (1970).

<sup>67</sup> Pub. L. No. 95-190, § 14(a)(60)-(65), (b)(5), 91 Stat. 1403, 1405.

<sup>68</sup> CAA § 107, 42 U.S.C. § 7407.

<sup>69</sup> CAA §108(a)(1), 42 U.S.C. § 7408(a)(1).

established to protect the public health with a margin of safety.<sup>70</sup> Control of criteria pollutants is based on the use of a SIP to control local emissions in order to reach the ambient levels of pollution set out in the applicable NAAQS.<sup>71</sup> CAA section 126<sup>72</sup> provides EPA with additional authority to prevent major sources from releasing air pollution that may significantly contribute to levels of air pollution in excess of a NAAQS in another state,<sup>73</sup> however, the exercise of interstate control authority is rare under the CAA.<sup>74</sup> The SIP process is primarily local and is predicated on the SIP being able to achieve significant reductions in the targeted pollutant.<sup>75</sup> Carbon dioxide, however, cannot be controlled effectively by the SIP process because ambient tropospheric concentrations are essentially the same everywhere in the world.<sup>76</sup> The United States contributes only about twenty-three percent of the world's anthropogenic GHG releases,<sup>77</sup> and the transportation sector accounts for only twenty-six percent of the U.S. GHG emissions.<sup>78</sup>

If the EPA adopted a criteria pollutant approach to control CO<sub>2</sub> it would have to set numerical values that were either above or below present values. If CO<sub>2</sub> NAAQS values were set below present

<sup>70</sup> CAA §109(b)(1), 42 U.S.C. § 7409(b)(1).

<sup>71</sup> For a more thorough coverage of this process see ARNOLD W. REITZE, JR., AIR POLLUTION LAW, chapters 2 and 3 (1995).

<sup>72</sup> 42 U.S.C. § 7426.

<sup>73</sup> See *New York v. EPA*, 852 F.2d 574 (D.C. Cir. 1988).

<sup>74</sup> An action to control NO<sub>x</sub> transport using CAA § 126 is ongoing. The action has been stayed several times by an EPA. See Final Rule To Extend the Stay of Action on Section 126 Petitions for Purposes of Reducing Interstate Ozone Transport, 65 Fed. Reg. 2039 (Jan. 13, 2000). Litigation over the section 126 final rule led to a proposed settlement agreement on November 13, 2000. Proposed Settlement Agreement on Regulation Under Section 126 of the Clean Air Act Reducing Regional Transport of Ozone, 65 Fed. Reg. 67,742 (Nov. 13, 2000).

<sup>75</sup> See *Natural Res. Def. Council v. Train*, 545 F.2d 320 (2d Cir. 1976); *Union Elec. v. EPA*, 427 U.S. 246, 249-250 (1975).

<sup>76</sup> Carbon dioxide global concentrations in the atmosphere have increased from approximately 280 parts per million by volume (ppmv) in pre-industrial times to 358 ppmv, a 28% increase, in 1994. U.S. Envtl. Protection Agency, Inventory, of U.S. Greenhouse Gas Emissions and Sinks: 1990-1998, 1-4 (Apr. 2000) [EPA 236-R-00-001] [hereinafter EPA Inventory]. According to the Energy Information Administration's publication "International Energy Outlook 2000" of March 2000, p. 2-3:

World carbon emissions are projected to rise from 6.2 billion metric tons in 1997 to 8.1 billion metric tons in 2010 and 10.0 billion metric tons in the reference case projections, which do not take into account the potential impact of the Kyoto Protocol

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Much of the increase in carbon emissions is expected to occur in the developing world, where emerging economies produce the highest growth rates for energy use in the forecast. Emissions in the developing countries accounted for about 28 percent of the world total in 1990, but they are projected to make up 44 percent of the total by 2010 and nearly 50 percent by 2020. As a result, even if the Annex I countries [referenced in the Protocol] were able to meet the emissions limits or reductions prescribed in the Kyoto Protocol, worldwide carbon emissions still would grow substantially.

<sup>77</sup> Calculated from data found in the U.S. DEP'T OF STATE, CLIMATE ACTION REPORT 60 (July 1997) [hereinafter Climate Action Report] and THE COUNCIL ON ENVIRONMENTAL QUALITY, THE WORLD WIDE WEB, THE 1997 REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 347 (no date).

<sup>78</sup> EPA Inventory, *supra* note 76, at ES-7.

CO<sub>2</sub> atmospheric concentration, the entire country would have a nonattainment status with no realistic expectation that any measure taken as part of a SIP would lead to attainment of the standard. New and modified major stationary sources would be required to meet the lowest achievable emissions rate (LAER)<sup>79</sup> although no technology exists that meets the LAER definition.<sup>80</sup>

If a NAAQS value above the present CO<sub>2</sub> atmospheric concentration was selected, the entire nation would be in attainment, and significant effort to reduce CO<sub>2</sub> would not be needed. Compliance with the prevention of significant deterioration program would be the major applicable requirement.<sup>81</sup> This would require the application of best available control technology (BACT) to new or modified major emitting facilities, which requires the consideration of economic impacts and costs. Such a program, if implemented, would have no significant effect on atmospheric concentrations of carbon dioxide.<sup>82</sup>

Because the EPA's authority to regulate global warming gases using the criteria pollutant regulatory approach is ambiguous, at best, it should not be presumed that Congress gave the agency the power to enact a potentially costly but futile control mechanism.<sup>83</sup> Because there are no cost-effective, commercially available controls for CO<sub>2</sub> emissions, now or in the foreseeable future, neither new source performance standards (NSPS)<sup>84</sup> or new source review (NSR) requirement<sup>85</sup> can legally be applied to CO<sub>2</sub> sources. Any effort by the EPA to reduce CO<sub>2</sub> or other GHG pollutants through controls on mobile sources while not controlling GHGs from stationary sources would certainly fail to protect the environment. Moreover, if the CAA's statutory language is read with a focus on the goal it is intended to achieve, Congress cannot have intended to regulate global warming using a program completely unsuited to this purpose.<sup>86</sup>

The criteria pollutant approach also provides for secondary NAAQS that are to be set at a level "to protect the public welfare from any known or anticipated adverse effects associated with the presence

<sup>79</sup> CAA § 173(a)(2), 42 U.S.C. § 7503(a)(2).

<sup>80</sup> CAA § 171(3), 42 U.S.C. § 7501.

<sup>81</sup> CAA §§ 160-169B, 42 U.S.C. §§ 7470-7492.

<sup>82</sup> 42 U.S.C. § 169(3). The EPA can not effectively regulate CO<sub>2</sub> from new sources under CAA section 111

either.

<sup>83</sup> See *Huffman v. W. Nuclear, Inc.* 486 U.S. 663, 673 (1988); *Public Citizen v. Dept. of Justice*, 491 U.S. 440, 454 (1988)

<sup>84</sup> NSPS are technology-based standards that are uniform regardless of the ambient air levels. They must be based on "the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated." CAA § 111(a)(1), 42 U.S.C. § 7411(a)(1). A standard established pursuant to section 111 must be capable of being met under the most adverse conditions which can reasonably be expected. *Nat'l Lime Ass'n v. EPA*, 627 F.2d 416, 431 n.41 (D.C. Cir. 1980). It must be achievable by the industry and cannot be exorbitantly costly. *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973). There must be available technology or what may reasonably be projected (with appropriate time for compliance). *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 391-92 (D.C. Cir. 1973).

<sup>85</sup> NSR is used here to mean the requirements imposed on new or modified sources by both the nonattainment and PSD programs.

<sup>86</sup> See *Bailey v. U.S.*, 516 U.S. 137, 145 (1995) (the meaning of statutory language depends on its context). See also *United States Nat'l Bank of Oregon v. Independent Ins. Agents of Am.*, 508 U.S. 439, 455 (1992).

of such air pollutant in the ambient air.”<sup>87</sup> Controlling such effects in a SIP would be subject to the same limitations as discussed for controlling CO<sub>2</sub> and other GHGs in order to meet a primary standard.

### B. GHGs Do Not Fit the Definition of Hazardous Air Pollutants

The CAA regulates hazardous air pollutants, pursuant to section 112, that have adverse health effects or adverse environmental effects.<sup>88</sup> The CAA section 112(b)(1) lists 189 regulated hazardous pollutants; CO<sub>2</sub> is not on the list.<sup>89</sup> Substances that are regulated under subchapter VI because of their impact on stratospheric ozone cannot be regulated under section 112 solely due to adverse effects on the environment.<sup>90</sup> The EPA can add to the section 112 list

“Pollutants which present, or may present, through inhalation or other routes of exposure, a threat of adverse human health effects (including, but not limited to, substances which are known to be, or may reasonably be anticipated to be, carcinogenic, mutagenic, teratogenic, neurotoxic, which cause reproductive dysfunction, or which are acutely or chronically toxic) or adverse environmental effects whether through ambient concentrations, bioaccumulation, deposition, or otherwise, . . .”<sup>91</sup>

Carbon dioxide is not toxic in small doses as are the listed substances. None of the listed pollutants are ubiquitous in the environment as is CO<sub>2</sub>. It would be beyond reason to assume Congress overlooked listing a pollutant emitted in the U.S. at the rate of 5.388 billion metric tons in 1996.<sup>92</sup> Moreover section 112(b)(2) requires the health effects to come from “inhalation or other route of exposure” and then goes on to list effects such as carcinogenicity.<sup>93</sup> These health effects are all direct effects of exposure. The hypothesized health effects from CO<sub>2</sub> concentrations are indirect effects which differs from the type of harm caused by the existing substances regulated pursuant to section 112. Furthermore, when section 112 discusses adverse environmental effects as a basis for regulating a substance, the statutory language “whether through ambient concentrations, bioaccumulation, deposition, or otherwise . . .” indicates a concern with the direct harmful effects of a substance. Hazardous pollutants are those that pose serious health risks.<sup>94</sup> While the EPA is given some flexibility in making decisions on the “frontiers of scientific knowledge,” case law requires a rational basis for a decision to designate a pollutant as hazardous.<sup>95</sup>

<sup>87</sup> CAA §109(b)(2), 42 U.S.C. §7409(b)(2).

<sup>88</sup> 42 U.S.C. §7412.

<sup>89</sup> 42 U.S.C. § 7412(b)(1).

<sup>90</sup> CAA § 112(b)(2), 42 U.S.C. § 7412(b)(2).

<sup>91</sup> CAA § 112(b)(2), 42 U.S.C. § 7412(b)(2).

<sup>92</sup> STACY C. DAVIS, TRANSPORTATION ENERGY DATA BOOK, ED.19, calculated from data at 3-3, tbl. 3.2, U.S. DEPT. OF ENERGY (Sept. 1999) [ORNL-6958].

<sup>93</sup> 42 U.S.C. § 7412(b)(2).

<sup>94</sup> Report of the House Committee on Energy and Commerce on H.R. 3030, H. Rep. No. 101-490, Part I, 101<sup>st</sup> Cong., 2d. Sess., at 350 (1990). However, the senate report is more ambiguous and would allow environmental effects to include a significant adverse effect on the environment. See, Report of the Senate Committee on Environment and Public Works on S. 1630, S. Rep. No. 228, 101st Cong., 1st Sess., at 162 (1989).

<sup>95</sup> Ethyl Corp. v. EPA, 541 F.2d 1, 20 (1976) (lead standards). See also Am. Trucking Assoc v. EPA, 175 F.3d 1027 (D.C. Cir. 1999).

The hazardous air pollution program, to date, primarily regulates major stationary sources which are defined as emissions of ten tons per year of a hazardous air pollutant or twenty-five tons per year of a combination of hazardous air pollutants.<sup>96</sup> If CO<sub>2</sub> is considered a hazardous pollutant virtually every single-family home with an oil or gas furnace will be a major source under section 112.<sup>97</sup> The EPA has developed a program as part of its Integrated Air Toxics Strategy that meets the mandate set forth in CAA section 112(b)(3) and (f) and section 202(l).<sup>98</sup> This program is discussed in section II of this memorandum, but does not include the regulation of GHGs. Moreover, the EPA already has a "Great Water Program" pursuant to CAA section 112(m) to deal with atmospheric deposition of hazardous air pollutants (HAPs), and other pollutants, in order to protect major water bodies.<sup>99</sup> In short, any attempt to classify GHGs as "Hazardous Air Pollutants" under Section 112 would distort EPA's existing program beyond recognition.

### C. CAA Section 115 Provisions on International Transport Do Not Apply to GHGs.

CAA section 115 allows the Administrator to force a state to control air pollution if it causes or contributes to air pollution that endangers public health or welfare in a foreign country that has given the United States reciprocal rights concerning control of air pollution.<sup>100</sup> The EPA resisted using section 115 to protect Canada, the nation most effected by U.S. air pollution emissions, by interpreting the reciprocity requirements to prevent Canada from receiving protection.<sup>101</sup> If Canada has had difficulty in obtaining protection from air pollutants crossing a national border, it is difficult to understand how the EPA could argue that section 115 may be used to control world-wide tropospheric concentrations that are subject only to non-binding international controls. Until the United States becomes a party to the Kyoto Protocol and it enters into effect, the United States cannot rationally claim that section 115's reciprocity requirements, which are necessary to trigger its use, have been met.

<sup>96</sup> CAA § 112(a)(1), 42 U.S.C. § 7412(a)(1).

<sup>97</sup> Véronique Bugnion and David M. Reiner, *A Game of Climate Chicken: Can EPA Regulate Greenhouse Gases Before the U.S. Senate Ratifies the Kyoto Protocol?* MIT JOINT PROGRAM ON SCIENCE AND POLICY OF GLOBAL CHANGE, Report No. 57, at 17 (November 1999).

<sup>98</sup> 42 U.S.C. §§ 7412(b)(3) & (f), 7521(l).

<sup>99</sup> 42 U.S.C. § 7412(m).

<sup>100</sup> 42 U.S.C. § 7415.

<sup>101</sup> See *Thomas v. New York*, 802 F.2d 1443 (D.C. Cir. 1986), cert. denied, 482 U.S. 919 (1987); *Her Majesty The Queen in Right of Ontario v. EPA*, 912 F.2d 1525 (D.C. Cir. 1990).

**D. Subchapter VI Provisions on Stratospheric Ozone Protection Were Not Intended to Regulate GHGs.**

The CAA in subchapter VI provides a program to control any substance that “causes or contributes significantly to harmful effects on the stratospheric ozone layer.”<sup>102</sup> This subchapter gives the Administrator the responsibility to publish the global warming potential of substances listed in section 602.<sup>103</sup> Section 603(e) then goes on to state, “[t]he preceding sentence shall not be construed to be the basis of any additional regulation under this chapter.” The legislative history of subchapter VI, as discussed above, makes it clear that it was not intended to be used to control GHGs.<sup>104</sup>

**E. No Other Provisions in The 1990 CAA Amendments Reflect Any Congressional Intent to Regulate GHGs.**

The 1990 CAA Amendments added only a few minor references to either carbon dioxide or global climate change, and the Act, as a whole, shows no Congressional intent to regulate CO<sub>2</sub> emissions.<sup>105</sup> The Conference Committee did change CAA section 103(g), one of the three sections of the Act to use the term “carbon dioxide,” to add the term “nonregulatory.”<sup>106</sup> Section 103(g) gives the Administrator the authority to carry out research and demonstration programs for air pollution prevention. This includes working on nonregulatory strategies to control carbon dioxide from stationary sources.<sup>107</sup> To make its position clear, section 103(g) repeats the words “nonregulatory strategies” five times in that section.<sup>108</sup> In the event the section might still not be clear, it goes on to say, “[n]othing in this subsection shall be construed to authorize the imposition on any person of air pollution control requirements.”<sup>109</sup>

Public Law 101-549 contains the CAA Amendments of 1990, but it also contains provisions that are not included in the CAA. One provision, section 821, is entitled “Information Gathering on Greenhouse Gases Contributing to Global Climate Change.”<sup>110</sup> It requires the EPA to issue regulations to have CO<sub>2</sub> monitored from “all affected sources subject to title V” of the CAA and have them reported to the Agency.<sup>111</sup> No other provision of Public Law 101-549 that has not already been discussed as part of the CAA provides any authority for the EPA to regulate GHGs.

<sup>102</sup> CAA § 602(a), 42 U.S.C. § 7671a(a).

<sup>103</sup> CAA § 602(e), 42 U.S.C. § 7671a(e).

<sup>104</sup> See footnotes 11-29 and the associated text.

<sup>105</sup> Pub. L. No. 101-549 (1990).

<sup>106</sup> See also CAA § 602(e), 42 U.S.C. § 7671a(e); Pub. L. No. 101-549, section 821, modifies CAA § 412(b) & (c), 42 U.S.C. § 7651k(b) & (c).

<sup>107</sup> 42 U.S.C. § 7403(g).

<sup>108</sup> CAA § 103(g), (g)(1), (g)(2), (g)(3), and (g)(4), 42 U.S.C. § 7403(g), (g)(1), (g)(2), (g)(3), and (g)(4).

<sup>109</sup> CAA § 103(g), 42 U.S.C. § 7403(g).

<sup>110</sup> 42 U.S.C. § 7651k (see note (a)).

<sup>111</sup> *Id.*

**IV. Even If EPA Has Authority Under § 202(a) to Regulate Greenhouse Gases, There is No Mandatory Duty to Regulate.**

Even if the EPA were to reverse itself regarding its stated absence of any plan to regulate CO<sub>2</sub> and its commitment to Congress not to implement the Kyoto Protocol prior to its ratification, it is clear that the CAA does not require such regulation. Before any “duty” to regulate arises, the EPA must first determine that CO<sub>2</sub> is an “air pollutant.” The EPA must then determine that CO<sub>2</sub> emissions from new motor vehicles cause, or contribute to, air pollution “which may reasonably be anticipated to endanger public health or welfare.” Even assuming the EPA has the authority to make these determinations, it has not done so.

The Petitioners, in footnote 133 “Argument I (a) & (b)” of their petition, say that the Administrator has “already” made these determinations for all of the substances listed in the petition and thus contend that the Administrator “must exercise her authority to regulate.” Pointing to the word “shall,” they contend that “§ 202 creates a mandatory duty to promulgate standards.” The principal case they cite in support of this view is *NRDC v. Reilly*<sup>112</sup> where the court said:

Given the plain and unmistakable language of section 202(a)(6), we need not proceed beyond the first step of the Chevron analysis. Section 202(a)(6) mandates that “within one year after November 15, 1990, the Administrator shall . . . promulgate standards under this section requiring that new light duty vehicles . . . shall be equipped with [ORVR] systems.” 42 U.S.C. §7521(a)(6) (Supp. 1990) (emphasis added). In this case, the language of the relevant section most manifestly obligates EPA to promulgate standards for ORVR systems. See *Hewitt v. Helms*, 459 U.S. 460, 471, 103 S. Ct. 864, 871, 74 L.Ed.2d 675 (1983) shall” is “language of an unmistakably mandatory character”); *Her Majesty the Queen v. USEPA*, 912 F.2d 1525, 1533 (D.C. Cir. 1990) (“shall” signals mandatory action).

\* \* \* \* \*

Read in context, the central purpose of section 202(a)(6) is to impose regulatory standards for ORVR systems over a given and detailed time frame.

The court, in holding the EPA was obligated by the CAA to regulate, noted no “words of condition” accompanying the word “shall” that “derogate from the EPA’s duty to promulgate.”<sup>113</sup> That same statement is not appropriate to section 202(a)(1). In that section, “words of condition” accompany the word “shall,” which require a determination that such air pollutant “may reasonably be anticipated to endanger public health or welfare.” The EPA’s General Counsel in April 1998 referred to this requirement as “regulatory criteria” that must be met before a regulation may be promulgated. Such preliminary “conditions” or “criteria” never have been met or even been initiated by the EPA, notwithstanding the contentions of the Petitioners.<sup>114</sup>

<sup>112</sup> 983 F. 2d 259, 266-67 (D.C. Cir. 1993).

<sup>113</sup> NRDC, 983 F. 2d at 266.

<sup>114</sup> See *supra* note 1.

The Petitioners cite the legislative history of the 1977 amendments to the CAA that modified the "which" clause of section 202 (a)(1) which sets out the condition that must first be met by the EPA in deciding whether to regulate. Petitioners explain that under the CAA, "the Administrator is permitted to make a precautionary decision to regulate pollutants in order to protect public health and welfare." They then contend "the EPA and other Federal agencies have already made numerous findings that greenhouse gas emissions from new motor vehicles are air pollutants reasonably anticipated to endanger public health and welfare" and thus the Administrator has the "statutory obligation to regulate."

This is not true. The EPA has not even commenced meeting the conditions or criteria in order to regulate. The exercise of the EPA's legal authorities involves adherence to specified legal and technical procedural steps as well as its use of discretion as to when to initiate this authority. For example, before proposing a national ambient air quality standard (NAAQS), the EPA must review the relevant scientific and technical information in order to develop the air quality criteria referenced in section 108. The Agency has not initiated this formal process regarding CO<sub>2</sub>, nor, as it has said repeatedly, does it currently have plans to do so. This "formal process" is required by section 202(a).

In 1977, the House Committee on Interstate and Foreign Commerce, in its report on its 1977 Amendments to the CAA said:

On the other hand, the committee does not intend this language as a license for "crystal ball" speculation. The Administrator's judgment must, of course, remain subject to restraints of reasoned decision making. See *Portland Cement Association v. Ruckelshaus*, 486 F.2d 365, 391 (D.C. Cir. 1973). In addition, of course, the Administrator's exercise of judgment will be subject to the careful and thorough procedural safeguards contained in section 305 of the bill.<sup>115</sup>

Under the circumstances, no "statutory obligation" exists to regulate, assuming that the CAA authorizes such regulation as the Petitioner contends. Absent such an obligation, there is no basis for a citizen suit pursuant to section 304 of the CAA being sustained.

The Petitioner asserts that section 202 of the CAA allows the EPA "to implement a variety of regulatory standards to control greenhouse gas emissions," including, according to the Petitioner's footnote, "authority to implement a corporate average fuel economy based standard." Note, however, that Congress already has enacted automotive fuel economy legislation. The authority to promulgate fuel economy standards is given to the Secretary of Transportation by the Energy Policy and Conservation Act (EPCA).<sup>116</sup> The Act also gave the EPA a limited role in implementing that law. Given the limited role for the EPA since EPCA was enacted in the 1970s, it is hard to imagine Congress would have delegated to the EPA authority to use the CAA to promulgate a rule establishing a competing corporate average fuel economy based standard.

<sup>115</sup> H. Rep. 95-294, at 50-51 (May 12, 1977).

<sup>116</sup> Pub. L. No. 94-162 added a new title V to the Motor Vehicle Information and Cost Savings Act (codified at 49 U.S.C. 32901, et seq.).



In addition, it is difficult to imagine the EPA would go through the process of determining that CO<sub>2</sub> is an air pollutant in light of the EPA's statements by the prior administration to Congress that it has no plan to regulate CO<sub>2</sub>. By way of illustration, in letters to Rep. James Sensenbrenner, Jr., then Chairman of the House Science Committee, dated August 8, 1998, November 5, 1998 and March 9, 1999, the EPA said it "does not intend to regulate NO<sub>x</sub>, SO<sub>2</sub> or CO<sub>2</sub> under section 112 of the Act."<sup>117</sup> In an October 2, 1998 letter, EPA also said:

Whether any particular substance is an air pollutant depends on whether it is encompassed by the definition in section 302(g) of the Clean Air Act. As explained in the April 10, 1998 memorandum "the exercise of EPA's authority to regulate air pollutants is linked to a determination by the Administrator regarding the air pollutants' actual or potential harmful effects on public health, welfare or the environment." The Administrator has made no determination to date to exercise that authority with respect to carbon dioxide. If the Administrator were to make such a determination in the future, the public would have the ability to comment on such a determination through the rulemaking process.<sup>118</sup>

Moreover, such an effort would appear to be inconsistent with the Clinton Administration's responses of April 1998 by former State Department Under Secretary Stuart Eizenstat to Senators Chuck Hagel and Jesse Helms. In the context of issues regarding the question of ratification of the Kyoto Protocol, Eizenstat said: "The Administration will not seek to impose binding restrictions on U.S. business before the U.S. Senate ratifies the Kyoto Protocol."<sup>119</sup> This petition urges EPA to impose such restrictions before the President submits the Protocol to the Senate for advice and consent to ratification. President Bush said on March 13, 2001, that he opposes the Protocol "because it exempts 80 per cent of the world" and "would cause serious harm to the U.S. economy," and thus he will not submit it to the Senate.

## V. Conclusion

Based on the preceding detailed review of the Clean Air Act, it is unlikely that the EPA has the authority to regulate GHGs emitted by mobile or stationary sources. Even if such authority exists, it is certainly not mandatory. Each of the programs that might be used to regulate GHGs requires additional findings to be made by the Administrator that 1) have not yet been made, and 2) will be difficult and perhaps impossible to support in the manner that is legally required. Moreover, any additional requirements concerning GHG emissions from motor vehicles would require EPA findings that the cost and technology

<sup>117</sup> Letter from EPA Administrator Carol M. Browner to Representative F. James Sensenbrenner, Jr., Aug. 8, 1998, at 4; Letters from EPA Assistant Administrator Robert Perciasepe to Representative E. James Sensenbrenner, Jr., Nov. 5, 1998, at 8 and Mar. 9, 1999, at 4 & 5.

<sup>118</sup> Letter from EPA Assistant Administrator Robert Perciasepe to Representative F. James Sensenbrenner, Jr., Oct. 2, 1998, at 4.

<sup>119</sup> U.S. Dept. of State, Questions For The Record For Undersecretary of State Stuart Eizenstat Submitted By Senator Chuck Hagel and Senator Jesse Helms United States Senate Committee On Foreign Relations Hearing On Implications Of The Kyoto Protocol, Feb. 13, 1998 (April 1998, at 8).

necessary to meet such requirements are compatible with existing regulatory requirements, such as the "Tier 2" standards promulgated last year.

Attached to this memorandum is an Appendix detailing the history of the international legal response to concerns about global warming, from the late 1980s to the present. It is clear from a review of this history that, although the U.S. has been part of a concerted global effort on this subject, no international consensus has yet emerged since entry into force of the Framework Convention on Climate Change (FCCC) on how to address climate change from a regulatory standpoint. Moreover, Congress has deliberately chosen **not** to provide any government agency with authority to regulate GHGs; it has repeatedly addressed GHGs in a non-regulatory fashion. In light of this history, it is not credible to claim that the EPA has some latent power and obligation, under a selective reading of the CAA, to regulate GHG emissions. The U.S. Department of State has recognized that "[n]o single country can resolve the problem of global climate change."<sup>120</sup> For more than a decade the United States has been intensely engaged in international efforts to address GHGs on an equitable basis. These efforts are wholly inconsistent with a premature effort by a U.S. agency to deal with a global issue by regulating only one of its industries. All of Congress' actions on this issue, including the Byrd-Hagel Resolution, recognize that haphazard GHG regulation would be environmentally useless and economically damaging, in the absence of a coordinated global program to address climate change.

For the reasons outlined above, I respectfully conclude that the CAA does not authorize or mandate EPA to regulate GHGs from mobile sources. For EPA to attempt such regulation would be inconsistent with both the legislative history of the CAA, and the history of U.S. efforts to find an international solution for climate change.

Based on the material discussed in this memorandum, the EPA has no clear authority to regulate GHGs. Moreover, even if such authority exists, the EPA must make numerous findings as a prerequisite to regulating. However, it is incredulous, given the extent of the Congressional effort to consider the issues concerning GHGs, to claim that the EPA has some latent power and obligation under the CAA to regulate these emissions in the absence of a credible mandate. The U.S. Department of State has recognized that "[n]o single country can resolve the problem of global climate change."<sup>121</sup> For more than a decade the United States has been intensely engaged in international efforts to deal with GHGs. These efforts should not be compromised by a premature effort by one country (the United States) to deal with a global issue by regulating only one of its industries. In this area the need is to harmonize environmental programs and standards on a global basis.

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<sup>120</sup> Climate Action Report, *supra* note 77, at 17.

<sup>121</sup> *Id*

## APPENDIX

### The International Legal Response to Global Warming

The attempt to control global warming has involved primarily international efforts. "No single country can resolve the problem of global climate change."<sup>122</sup> In 1978, Congress enacted the first legislative statute called the "National Climate Program Act" that found that the "United States lacks a well-defined and coordinated program in climate-related research, monitoring, assessment of effects and information utilization" and which established a national climate program to "assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications."<sup>123</sup> Almost ten years later, Congress enacted the Global Climate Protection Act of 1987.<sup>124</sup> That Act set "Goals of United States Policy," which included increasing "worldwide understanding of the greenhouse effect and its environmental and health consequences" and fostering "cooperation among nations to develop more extensive and coordinated scientific research efforts with respect to the greenhouse effect." This resulted in a joint EPA-State Department report to Congress that stressed the global nature of climate change and greenhouse gas emissions and called for "international consensus" and a "comprehensive" approach to "addressing potential climate change," which eschewed singling out certain industries or certain gases for regulation.<sup>125</sup>

None of these statutes authorized or mandated, directly or indirectly, the regulation of greenhouse gas emissions. Moreover, it is quite evident from the nature of these statutes and the above-mentioned joint report, that the Congress and several Administrations -- going back to the origin of the EPA in 1970 -- were not considering a regulatory approach to climate change domestically or, for that matter, internationally.

The 1987 Act also provided for the Secretary of State to coordinate U.S. negotiations concerning global climate change and for the EPA to develop and propose to Congress a coordinated national policy on global climate change.<sup>126</sup> In 1988 the United Nations and the World Meteorological Organization appointed an international group of scientists to investigate global warming as the Intergovernmental Panel on Climate Change (IPCC).<sup>127</sup> The IPCC advised the International Negotiating Committee (INC) which was established by the United Nations General Assembly on December 21, 1990 to coordinate negotiation of an international treaty on climate change. On December 22, 1989, the United Nations General Assembly called for a global summit on environmental and development issues.<sup>128</sup> This was to be the second such meeting; the first was the Stockholm Conference on The Human Environment held in 1972. Among the issues of concern to the nations of the world was the threat of global warming. By January 1991 thirteen

<sup>122</sup> U.S. DEP'T OF STATE, CLIMATE ACTION REPORT 60 (July 1997) [hereinafter Climate Action Report], at 17.

<sup>123</sup> Pub. L. No. 95-367, 92 Stat. 601 (Sept. 17, 1978), codified at 15 U.S.C. § 2901, et. seq.

<sup>124</sup> 15 U.S.C. 2901, note.

<sup>125</sup> U.S. DEPT. OF STATE & U.S. ENVTL. PROTECTION AGENCY, U.S. EFFORTS TO ADDRESS GLOBAL CLIMATE CHANGE (Report to Congress Feb. 1991).

<sup>126</sup> *Id.* at §§ 5(f)(2) and 5(d)(9).

<sup>127</sup> U.N. General Assembly Res. No. 43/53 (Dec. 6, 1988)

<sup>128</sup> U.N. General Assembly Res. No. 44/228.

developed nations had pledged to reduce or stabilize their CO<sub>2</sub> emissions by 2005.<sup>129</sup> But the United States did not join in this pledge,<sup>130</sup> and in its National Energy Strategy<sup>131</sup> projected a continuous increase in U.S. energy consumption<sup>132</sup> and a twenty-five percent increase in CO<sub>2</sub> emissions by 2015.<sup>133</sup> Its program for the control of GHGs in 1990 was largely based on controlling CFCs that were already subject to production reductions under both the Montreal Protocol and the CAA.<sup>134</sup>

Two statutes enacted in 1990 provided support for developing a U.S. position on global research. On November 16, 1990, the day after the CAA Amendments were enacted, Congress passed the Global Change Research Act to establish a Committee on Earth and Environmental Sciences to coordinate a ten year research program.<sup>135</sup> On November 22, 1990, a Global Climate Change program was created as Title XXIV of the Food and Agriculture Act of 1990 to research global climate agricultural issues and to provide liaison with foreign countries on such issues.<sup>136</sup> Neither of these laws provide regulatory authority to any federal entity. In 1991 the Global Environment Facility (GEF) was created as a collaborative effort between the World Bank and the United Nations to finance efforts of developing countries to protect the global environment including climate change reduction efforts. As of 1997 the United States had contributed \$190 million, making it the second largest contributor.<sup>137</sup> The U.S. pledged an additional \$430 million for fiscal years 1999 through 2002.<sup>138</sup>

#### A. Rio "Earth Summit"

The INC met in five sessions from February 1991 to May 1992, and adopted the United Nations Framework Convention on Climate Change (FCCC) on May 2, 1992. From June 3 to 14, 1992, the U.N. Conference on Environment and Development (UNCED) was held in Rio de Janeiro, Brazil as the

<sup>129</sup> CONGRESS OF THE UNITED STATES, OFFICE OF TECHNOLOGY ASSESSMENT, CHANGING BY DEGREES: STEPS TO REDUCE GREENHOUSE GASES 7 (1991). The nations were Austria, Australia, Canada, Denmark, France, Germany, Italy, Japan, The Netherlands, New Zealand, Norway, Sweden and the United Kingdom.

<sup>130</sup> Meyer, *United States Increasingly Isolated on Global Warming*, NUCLEUS, Summer 1990, at 3. NO<sub>x</sub> also is subject to the NO<sub>x</sub> Protocol that aims to assure that by the end of 1994 emissions do not exceed a baseline. The Protocol was negotiated under the framework of the 1979 Convention on Long-range Transboundary Air Pollution. It was signed in October 1988 and involved seventeen industrialized nations when it entered into force in February 1991. U.S. Gen. Acct. Off., INTERNATIONAL AGREEMENTS ARE NOT WELL MONITORED 15 (Jan. 1992). [GAO/RCED-92-43]

<sup>131</sup> The Department of Energy Organization Act, 42 U.S.C. §§ 7101-7140, that created the Department of Energy provided in title VIII for the President to submit a National Energy Policy Plan to Congress by April 1, 1979 and every two years thereafter. The plan was to consider energy conservation and environmental protection along with the more traditional considerations. There were submissions under title VIII: by the Carter administration in 1979, by the Reagan administration in 1981, 1983, 1985, and 1987, and by the Bush administration in 1991. U.S. Gen. Acct. Off., CHANGES NEEDED TO MAKE NATIONAL ENERGY PLANNING MORE USEFUL 9 (Apr. 1993). [GAO/RCED-93-29]

<sup>132</sup> NATIONAL ENERGY STRATEGY 30-72 (1<sup>st</sup> ed. 1991/1992).

<sup>133</sup> *Id.* at 179.

<sup>134</sup> *Id.* at 181.

<sup>135</sup> Pub. L. No. 101-606 (1990).

<sup>136</sup> 7 U.S.C. § 6701.

<sup>137</sup> CLIMATE ACTION REPORT, *supra* note 1, at 250.

<sup>138</sup> U.S. GEN. ACCOUNTING OFF., INFORMATION ON GLOBAL ENVIRONMENTAL FACILITY'S FUNDING AND PROJECTS 1, 5 (June 1999) [GAO/RCED-99-149].

returned fifth session of the INC. In Rio, 178 nations were represented, and 110 heads of state attended.<sup>139</sup> Most developed countries pushed an environmental agenda, but developing countries were more interested in their economic development.

The Rio meeting produced the "Agenda 21" which is an 800-page document, divided into four sections and covering forty subjects, that was to be a blueprint for environmental and development policy for the coming decades.<sup>140</sup> In addition, there were agreements prepared prior to the UNCED with only the signatures of the nations left to be affixed. These included two conventions, one dealing with climate change and the other with biodiversity, both of which were controversial.<sup>141</sup> There also were two other environmental agreements, one on forest principles and another on desertification.

The UNCED led to the creation of a new Commission on Sustainable Development (CSD) under the Economic and Social Council of the U.N. Its mission is to evaluate the implementation of the Agenda 21 programs, and it is the first U.N. body that has a specific mandate to monitor the performance of individual countries.<sup>142</sup> The UNCED also produced signatures in June 1992 by the heads of state and other heads of delegations from 154 countries and the European Union to the FCCC that was the first international agreement to address climate change.<sup>143</sup> At the insistence of the Bush administration, however, the convention avoided deadlines or specific commitments.<sup>144</sup> The convention's ultimate objective, set forth

<sup>139</sup> Nicholas Yost, *Rio and the Road Beyond*, 11 ENVTL. L. NEWSL. (ABA), Summer 1992, at 1; Donald Brown, *The Relevance of "Agenda 21" to the States*, 14 ENVTL. L. NEWSL. (ABA), Fall/Winter 1994-95, at 1.

<sup>140</sup> The Agenda 21's first section deals with "Social and Economic Dimensions." It has chapters on international cooperation, combating poverty, promoting human health, population issues, and consumption issues. This last subject discusses the developing nations concern that the industrialized nations use a disproportionate share of the world's resources and cause most of the global environmental problems. Agenda 21's second section covers the Conservation and Management of Resources for Development. It includes chapters on protection of the atmosphere, land use planning, water resources, hazardous waste, solid waste and other topics. Its third section covers the role of interest groups in dealing with environmental issues. Chapters cover the role of women, children, indigenous people, non-governmental organizations, trade unions, industry, farmers, and the scientific and technology community. The fourth section deals with the "Means of Implementation" and covers subjects such as financial resources, environmentally sound technology, sustainable development, international institutions and legal development. There also was a Rio Declaration that was a shorter statement of principles of shared aspirations; it emphasizes sustainable development and has provisions for meeting development needs while protecting the environment. It also has specific, more focused provisions calling for internalizing environmental costs, immediate notification after environmental disasters, right-to-know provisions concerning hazardous materials and activities, and a provision calling for environmental impact statements.

<sup>141</sup> The Biodiversity Convention that was signed by all industrialized countries except the United States. The U.S. objection was primarily related to provisions concerning patent laws applicable to drugs and biotechnology.

<sup>142</sup> *Id.* The CSD has been criticized as incapable of addressing international environmental challenges. It lacks political support from the nations that make up the U.N.; it has an inadequate budget; and it competes for jurisdiction over environmental issues with the United Nations Environment Program (UNEP), the United Nations Development Program (UNDP), as well as other U.N. organizations and the secretariats to the numerous environmental treaties. See Daniel C. Esty, *Stepping Up To The Global Environmental Challenge*, 8 FORDHAM ENVTL. L. J. 103, 110 (1996).

<sup>143</sup> Economic Report of the President, 166 (1998).

<sup>144</sup> *Bush Holds Talks to One Binding Requirement on Global Warming*, CLEAN AIR REPORT, June 18, 1992, at 1. The background work for the Convention on Climate Change is discussed in Durwood Zaelke & James Cameron, *Global Warming and Climate Change - An Overview of the International Legal Process*, 5 AM. U.J. INT'L L. &

in Article 2, "is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." The convention did not attempt to define the term "dangerous." It called on developed countries, including the United States, to lower emissions of GHGs that were not controlled by the Montreal protocol to 1990 levels by the year 2000 on a non-binding basis.<sup>145</sup>

On October 7, 1992, the U.S. Senate unanimously approved the FCCC. As part of the hearings before the Senate Committee on Foreign Relations the administration made clear that the FCCC did not create legally binding targets or timetables for limiting greenhouse gas emissions.<sup>146</sup> The Senate gave its advice and consent to ratification of the FCCC by the President with the understanding that the Administration could not agree to amendments or protocols to the treaty that create binding emissions reduction commitment without subsequent Senate approval.<sup>147</sup> President Bush ratified the treaty October 13, 1992, and he urged the other 154 (and the European Union) countries that signed it in Rio to ratify it. Only Mauritius, the Marshall Islands and the Seychelles had ratified as of October 1992,<sup>148</sup> but one year later 161 countries had signed the treaty and thirty-one had ratified it.<sup>149</sup> On March 21, 1994, the Climate Treaty entered into force after the required fifty countries ratified the convention.<sup>150</sup>

## B. From Rio to Kyoto

After Rio, the U.S. Congress concentrated on voluntary approaches to GHG reduction, while the convention focused on developing an international protocol to the convention. In 1992, the Energy Policy Act (EP Act), with thirty titles on energy regulation and policy, was enacted.<sup>151</sup> Its section 1605(b) requires the U.S. Department of Energy (DOE) to establish guidelines for the voluntary reporting of GHG releases and their annual reduction.<sup>152</sup> Section 1605 began as the Cooper-Synar bill which was aimed at new large stationary sources of CO<sub>2</sub> and would have required permits and offsets under a program to be established by the EPA.<sup>153</sup> A watered down version of this proposal became EP Act section 1605 after all provisions of a binding or regulatory nature had been removed in order to provide only for voluntary reporting of greenhouse gas emissions.<sup>154</sup> Thus the EP Act considered and rejected mandatory restrictions

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POL'Y 249,272 (1990).

<sup>145</sup> United Nations Framework Convention on Climate Change, Art. 4, Sec. 2, 31 I.L.M. 849 (1992).

<sup>146</sup> Hearing Before the Senate Committee on Foreign Relations on the U.N. Framework Convention on Climate Change, 100th Cong. 2d. Sess. (Sept 18, 1992), at 93.

<sup>147</sup> *Id.*

<sup>148</sup> *Senate Approves International Treaty Amid Leader's Call for More Controls*, CLEAN AIR REPORT, Oct. 22, 1991, at 34.

<sup>149</sup> PRESIDENT WILLIAM J. CLINTON AND VICE PRESIDENT ALBERT GORE, JR., THE CLIMATE CHANGE ACTION PLAN, preface (Oct. 1993) [hereinafter Climate Change Action Plan].

<sup>150</sup> DAVID HUNTER, et al., INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 130, 117 (1998). *See also* the Secretariat homepage <<http://www.unfccc.de/>>.

<sup>151</sup> Pub. L. No. 102-486 (1992), 42 U.S.C. § 13385.

<sup>152</sup> *Launch of EPA-DOE 'Climate-Wise' Program For Cutting Emissions Expected in February*, Daily Env't Rep. (BNA), Dec. 2, 1993 at A-1.

<sup>153</sup> H.R. 5966, 101st Cong., 2d. Sess., 136 Cong. Rec. 37088 (1990); H.R. 2663, 102d Cong., 1st Sess., 137 Cong. Rec. H. 4611 (daily ed. 1991).

<sup>154</sup> 138 Cong. Rec. S1132 (daily ed. Feb. 6, 1992); 138 Cong. Rec. S17627 (daily ed. Oct. 8, 1992).

on greenhouse gases.

Among the provisions in the EP Act are requirements for the Secretary of Energy to assess the feasibility of stabilizing and/or reducing GHGs<sup>155</sup> and to assess the extent to which the United States is complying with international agreements on reducing such gases.<sup>156</sup> However, the global climate change provisions, found in Title XVI, have no provision authorizing mandatory reduction of GHGs.<sup>157</sup> Titles III, IV, V and VI are the alternative fuels and alternative vehicle provisions, which support the research, design and development of fuels and vehicles that use less petroleum and reduce carbon emissions.<sup>158</sup>

Neither of these provisions, nor the laws enacted in the 1970s and 1980s on climate change, provided regulatory authority to any federal entity regarding greenhouse gases. On the contrary, these laws demonstrate that Congress deliberately chose to address GHGs in a non-regulatory fashion, believing that a regulatory scheme was not appropriate.

More than thirty-nine states, plus industry, took part in the first year of the voluntary reporting of GHG emissions that was part of the 1992 Energy Policy Act.<sup>159</sup> Most of the reporting involved electricity supply and covered nearly six hundred projects to reduce emissions or prevent the release of greenhouse gases.<sup>160</sup> The EPA worked with states to conduct inventories of GHG emissions. By December 1995, twenty-eight states had completed inventories, fourteen other states were working to produce an inventory, and a few states--Minnesota, Oregon, Pennsylvania, and Washington-- were attempting to develop mitigation strategies.<sup>161</sup> In addition, some states were moving to require electric utilities to consider environmental impacts when planning electric power investment.<sup>162</sup> However, the United States did not meet its goal of returning major GHGs to 1990 CO<sub>2</sub> emission levels of 4.972 billion metric tons; in 1997, these emissions were 5.503 billion metric tons.<sup>163</sup> By 1998 emissions of CO<sub>2</sub> from fossil fuel combustion grew by eleven percent from the 1990 baseline and accounted for eighty percent of the GHG emissions in the United States.<sup>164</sup>

<sup>155</sup> 42 U.S.C. § 7321. See also EP Act § 1604, 42 U.S.C. § 13384.

<sup>156</sup> For background see U.S. GEN. ACCT. OFF., DOE'S PROGRAM AND ACTIVITIES RELEVANT TO THE GLOBAL WARMING PHENOMENON (Mar. 1990). [GAO/RCED-90-74BR]

<sup>157</sup> 42 U.S.C. § 7321.

<sup>158</sup> CLIMATE ACTION REPORT, *supra* note 1, at 38.

<sup>159</sup> See 42 U.S.C. § 13385.

<sup>160</sup> Pamela Wexler & David Hodas, *Special Committee on Climate Change and Sustainable Development 1995 Annual Report*, in NATURAL RESOURCES, ENERGY, AND ENVIRONMENTAL LAW 1995, THE YEAR IN REVIEW 164 (1996), at 168.

<sup>161</sup> *Id.* at 169.

<sup>162</sup> See *e.g.*, Massachusetts Elec. Co. v. Dept. of Public Utilities, 643 N.E.2d 1029 (Mass. 1994).

<sup>163</sup> STACY C. DAVIS, TRANSPORTATION ENERGY DATA BOOK, ED.19, at 3-6, tbl 3.5, U.S. DEPT. OF ENERGY (Sept. 1999) [ORNL-6958]. Higher than projected economic growth, lower than expected energy prices, and a population growth of 1.0 percent a year compared with the 0.7 percent growth used to develop the 1993 Climate Change Action Plan (CCAP) are some of the reasons the United States fell short of its target. U.S. GEN. ACCOUNTING OFFICE, GLOBAL WARMING: DIFFICULTIES ASSESSING COUNTRIES' PROGRESS STABILIZING EMISSIONS OF GREENHOUSE GASES 9 (Sept. 1996) [GAO/RCED-96-188].

<sup>164</sup> U.S. Env'tl. Protection Agency, Inventory, of U.S. Greenhouse Gas Emissions and Sinks: 1990-1998, 1-4 (Apr. 2000) [EPA 236-R-00-001] [hereinafter EPA Inventory], at ES-3.

Signatory countries to the FCCC are required to submit estimates and sinks for the base year of 1990. On June 21, 1993, the EPA produced a review draft of the required document.<sup>165</sup> In September 1994 the final report dropped gases covered under the Montreal Protocol because their use was being phased out.<sup>166</sup> With this change, CO<sub>2</sub> accounted for eighty-five percent of U.S. global warming emissions, methane accounted for eleven percent, N<sub>2</sub>O emissions accounted for two percent.<sup>167</sup>

In October 1993 President Clinton and Vice President Gore released their plan to return greenhouse gases to 1990 levels by the year 2000.<sup>168</sup> It included measures to reduce all greenhouse gases and to protect forests, "which are greenhouse gas "sinks" that store carbon removed from the atmosphere."<sup>169</sup> The Administration committed itself to \$1.9 billion in new and redirected funding between 1994-2000<sup>170</sup> and included almost fifty actions that involved all sectors of the economy.<sup>171</sup> The program did not seek new legislation. This action plan was to be the basis for the U.S. National Action Plan that had to be submitted to the Conference of the Parties to the FCCC. The Convention was to enter into force when fifty nations ratify it, but at the time the Action Plan was released that had not yet occurred.<sup>172</sup> However, the President and Vice President's Action Plan was criticized for failing to stabilize greenhouse gas emissions to 1990 levels.<sup>173</sup> GHG emissions continued to rise and by 1998 were eleven percent above the 1990 baseline.<sup>174</sup> At the end of 1994 about half the parties to the FCCC had not submitted national action plans.<sup>175</sup>

In the United States, changes in the control of the Congress after the November 1994 elections that created a Republican majority affected the summit of the treaty partners that was held in Berlin on March 28-April 7, 1995. Sen. Jesse Helms (R-NC), chairman of the Senate Foreign Relations Committee, in a letter to the Secretary of State, said that the U.S. position "raises some serious questions."<sup>176</sup> Sen. Frank

<sup>165</sup> EPA, ESTIMATION OF GREENHOUSE GAS EMISSIONS AND SINKS FOR THE UNITED STATES (1990). The contribution to global warming from U.S. emissions was sixty-nine percent from CO<sub>2</sub>, twenty-three percent from CFCs, five percent from methane (CH<sub>4</sub>) and three percent from N<sub>2</sub>O, primarily from fertilizer use. See also David Hodas, *The Climate Change Convention and Evolving Legal Models of Sustainable Development*, 13 PACE ENVTL. L. REV. 75 (1995).

<sup>166</sup> U.S. ENVTL. PROTECTION AGENCY, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-1993, ES-4 (Sept. 1994) [EPA 230-R-94-014].

<sup>167</sup> *Id.* at ES-2. The impact of the photochemically important gases, CO, NO<sub>x</sub>, nonmethane VOCs and SO<sub>2</sub>, were not included in the estimate because there was no approved method to estimate their contribution to global warming. *Id.*

<sup>168</sup> Climate Change Action Plan, *supra* note 28.

<sup>169</sup> EPA Inventory 1990-1993, *supra* note 43.

<sup>170</sup> *Id.* at ii.

<sup>171</sup> *Id.* at 1.

<sup>172</sup> *Id.* at 4.

<sup>173</sup> For an interesting evaluation of the Rio Declaration, see David Wirth, *The Rio Declaration on Environment and Development: Two Steps Forward and One Back, or Vice Versa?*, 29 GA. L. REV. 599 (1995).

<sup>174</sup> EPA Inventory, *supra* note 43, at ES-3.

<sup>175</sup> *Focus of Climate Change Talks Should be on Current Treaty Provisions, Group Says*, Daily Env't Rep. (BNA), Feb. 2, 1995 at A-9.

<sup>176</sup> U.S. Climate Action Network, Special Report, April 1994, at A-10.



Muskowski (R-AK), chairman of the Senate Committee on Energy and Natural Resources said in a letter to the Secretary of Energy, he feared the U.S. position would "result in specific targets and timetables for greenhouse gas reductions that may be unachievable, detrimental to our national interest and/or premature given our current scientific understanding of the role of anthropogenic greenhouse gas emissions in global climate change."<sup>177</sup>

In February 1995, the U.N.'s International Negotiating Committee met in New York. The Committee had conducted the talks that led to the FCCC. Its last task was to complete preparations for turning its work over to a new body, the Conference of the Parties to the Convention, which was to meet for the first time in Berlin in March 1995.

The Berlin meeting was the beginning of the negotiation process leading to adoption of the Kyoto Protocol by the Parties to the FCCC. The introduction to the Protocol published by the FCCC Secretariat explains what led to this process (p. 1):

When governments adopted the United Nations FCCC in 1992, they recognized that it could be a launching pad for stronger action in the future. By establishing an ongoing process of review, discussion, and information exchange, the Convention makes it possible to adopt additional commitments in response to changes in scientific understanding and in political will.

The first review of the adequacy of developed country commitments was conducted as required at the first session of the Conference of the Parties (COP-1), which took place in Berlin in 1995. The Parties decided that the commitment by developed countries to aim at returning their emissions to 1990 levels by the year 2000 was inadequate for achieving the Convention's long-term objective of preventing 'dangerous anthropogenic [man-made] interference with the climate system.'

Ministers and other senior officials responded by adopting the 'Berlin Mandate' and launching a new round of talks on strengthening developed country commitments. The Ad Hoc Group on the Berlin Mandate (AGBM) was set up to draft an agreement; after eight sessions it forwarded a text to COP-3 for final negotiation.

The Intergovernmental Panel on Climate Change (IPCC), an international group of scientists brought together at the request of the United Nations, issued a report on November 30, 1995.<sup>178</sup> The

<sup>177</sup> *Id.*

<sup>178</sup> The report is entitled "The IPCC Working Group I 1995 Summary for Policymakers." See *IPCC Working Group Report Documents "Discernible Human Influence" on Climate*, Daily Env't Rep. (BNA), Dec. 1, 1995, at A-6 [hereinafter *IPCC Working Group*], *Intergovernmental Panel on Climate Change, Working Group I, 1995 Summary for Policy Makers, Agreed to Nov. 29 in Madrid* (Text), Daily Env't Rep. (BNA), Dec. 1, 1995, at E-15 [hereinafter *Intergovernmental Panel*].

report stated that global warming was occurring and human factors are responsible.<sup>179</sup>

On May 16, 1996, the Energy Information Administration of the U.S. Department of Energy released a report projecting an increase in GHGs for Organization for Economic Cooperation and Development (OECD) countries of thirty-one percent above 1990 levels over the next twenty years and a worldwide increase of fifty-four percent. Thus, the FCCC's goal of reducing the emissions of greenhouse gases to 1990 levels by 2000 was not going to occur.<sup>180</sup>

The United Nations issued another report on July 8, 1996, as the signatories to the U.N. FCCC began their Second Conference of the Parties (COP-2) in Geneva,<sup>181</sup> saying that many developed countries were not going to reduce GHG emissions to 1990 levels by the year 2000.<sup>182</sup> An important development at the conference was the U.S. initiative indicating it was, for the first time, willing to have legally binding targets to cap CO<sub>2</sub> emissions in the United States.<sup>183</sup> On July 18, 1996, the conference took note of the Geneva Ministerial Declaration and agreed that it should be annexed to the report of the Conference. The "ministerial declaration" called for binding objectives for greenhouse gases to be established within specific time frames.<sup>184</sup> Specific figures, however, were to be produced at the preliminary meeting held in Geneva in December 1996. The delegates of 134 countries agreed to continue discussions at the Third conference of the Parties (COP-3) meeting to be held in Kyoto, Japan in December 1997.<sup>185</sup> Only two of the European Union states -- the United Kingdom and Germany -- were expected to meet the existing greenhouse gas reduction commitment under the 1992 U.N. Climate Convention.<sup>186</sup>

On September 6, 1996, in Linz, Austria, the European Environment Agency (EEA) reported that the European Union (EU) must accelerate its greenhouse gas reductions if it was to meet FCCC goals. The EEA reported that reductions of thirty to fifty-five percent by 2010 from 1990 levels by industrialized countries might be needed, but, greenhouse gas emissions in OECD countries, which are the most industrialized nations, were increasing. EU countries, however, were reluctant to take actions unilaterally, and the less industrialized EU members -- Greece, Spain, Portugal, and Ireland wanted the other EU

<sup>179</sup> IPCC Working Group, *supra* note 57, at A-6.

<sup>180</sup> *50 Percent Growth in World Energy Demand Will Fuel Carbon Emissions, Report Asserts*, Daily Env't Rep. (BNA), May 17, 1996, at A-1. Oil consumption was projected to rise from sixty-nine million barrels per day (bpd) to ninety-nine bpd by 2015. Natural gas was expected to go from three percent to twenty-five percent of the world's energy consumption. However, renewable energy sources, including hydroelectricity, were expected to only increase from eight percent to 9.2 percent of the world energy by 2015.

<sup>181</sup> WORLD HEALTH ORGANIZATION, CLIMATE CHANGE AND HUMAN HEALTH (1996).

<sup>182</sup> *As Treaty Meeting Opens, Gap Widens Between Industry, Environmentalists*, Daily Env't Rep. (BNA), July 9, 1996, at A-6.

<sup>183</sup> *U.S., EU Present Initiatives Aimed at Cutting Greenhouse Emissions by 2005*, Daily Env't Rep. (BNA), July 18, 1996, at AA-1.

<sup>184</sup> Framework Convention On Climate Change, Report of The Conference Of The Parties On Its Second Session, Held At Geneva From 8 to 19 July, 1996, Addendum, Part Two: Action Taken By The Conference Of The Parties At Its Second Session 70 (Oct. 29, 1996) [FCC/CP/1996/15Add.1].

<sup>185</sup> *Progress Cited, Next Steps Planned in Negotiations on U.N. Climate Conference*, Daily Env't Rep. (BNA), July 22, 1996, at A-4.

<sup>186</sup> *Conference Approves Declaration Establishing Legally Binding Objectives*, Daily Env't Rep. (BNA), July 19, 1996, at A-3.

ers to reduce more greenhouse gases than the poorer EU countries.<sup>187</sup>

In July 1997, the Senate adopted the Byrd-Hagel resolution<sup>188</sup> which said that—

(1) the United States should not be a signatory to any protocol to, or other agreement regarding the United Nations Framework Convention on Climate Change of 1992, at negotiations in Kyoto in December 1997, or thereafter, which would—

(A) mandate new commitments to limit or reduce greenhouse gas emissions for the Annex I Parties, unless the protocol or other agreement also mandates new scientific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period; and

(2) any such protocol or other agreement which would require the advice and consent of the Senate to ratification should be accompanied by a detailed explanation of any legislation or regulatory actions that may be required to implement the protocol or other agreement and should also be accompanied by an analysis of the detailed financial costs and other impacts on the economy of the United States which would be incurred by the implementation of the protocol or other agreement.

a treaty cannot legally bind the United States until it is ratified by the President after a two-thirds vote and consent to ratification by the U.S. Senate,<sup>189</sup> the resolution indicated significant displeasure in date with the Administration's position. In the fall of 1997 a steady procession of studies concerning warming were released.<sup>190</sup>

### C. Kyoto

The Third Conference of the Parties (COP-3) was held in Kyoto, Japan, in December 1997 where,

*EU Must Accelerate Policy To Meet Treaty's Goals, Report Says*, Daily Envt Rep. (BNA) Sept. 13, 1996, at

143 Cong. Rec. S81138-39 (daily ed. July 25, 1997).

U.S. Constitution, Art. II, § 2.

*Environmental Groups, Industry Fire Volley of Pre-Kyoto Climate Studies*, 8 Inside EPA's Clean Air Report (Nov. 27, 1997). The federal Energy Information Administration (EIA) released its Annual Energy Outlook 1998 increased its prior year's estimates of carbon emissions with carbon emissions in the U.S. projected to significantly in the next two decades based on current policies. Charles River Associates released a report, *Policy Implications of the Adoption of Limits on Carbon Emissions from Industrialized Countries*, (1997), for the automobile industry, that predicted that a policy of limiting U.S. carbon emissions to 1990 levels cause the gross domestic product to be one percent below baseline output in the year 2010 and 2.7% below line by 2030 with a loss of two-thirds of the employment in the coal industry. The Competitive Enterprise published *The Costs of Kyoto: Climate Change Policy and Its Implications*, which claimed the risks of warming were not as significant as the risks of the proposals for dealing with it. The World Resources produced *Climate Protection Policies: Can We Afford to Delay?*, which said gradual efforts to deal with warming would be more expensive than an aggressive reduction strategy. Friends of the Earth released *Cool* and took the position that the elimination of eleven subsidies for industry could reduce U.S. carbon emissions monthly. World Watch issued its study, *Rising Sun, Gathering Winds: Policies to Stabilize the Climate and Ten Economies*, which focused on successful policies used by individual nations to control emissions. *Id.*

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after eleven days and nights, they hammered out and adopted a new agreement under Article 17 of the FCCC called the "Kyoto Protocol." The parties under the FCCC are divided into Annex I and non-Annex I countries. Annex I includes the OECD nations as of 1992 (which are the developed nations), the nations of Eastern and Central Europe, and the European states of the former Soviet Union.<sup>191</sup> The non-Annex I nations are the developing nations.<sup>192</sup> The Kyoto Protocol imposes target and timetable requirements on thirty-eight nations and the European Union, which are the same as those listed in Annex I of the FCCC.<sup>193</sup> The Annex I nations agreed to reduce their anthropogenic carbon dioxide equivalent emissions by at least five percent below 1990 levels in the commitment period 2008-2012.<sup>194</sup> The United States agreed to a seven percent reduction, which by 2010 is expected to be a thirty percent reduction below 1990 because of GHGs increases caused by population increase and economic growth. The European Union agreed to a eight percent reduction, and Japan agreed to a six percent reduction in carbon dioxide equivalent emissions.<sup>195</sup> However, implementation of several Articles of the Protocol concerning the commitments, economic flexibility measures, and compliance was deferred for future sessions of the COP and its subsidiary bodies.

At the Forth Conference of the Parties (COP-4), held in Buenos Aires in November 1998, the United States signed the Kyoto Protocol,<sup>196</sup> and the Parties began the negotiations for implementation with the Buenos Aires Plan of Action that covered a "package" of matters under the FCCC and the Protocol. However, because the Protocol was strongly opposed by many Senators, as indicated by S. Res. 98, and because it was found to be unfinished, the Clinton administration did not submit the Protocol to the Senate.<sup>197</sup>

The FCCC, it should be noted, does not classify greenhouse gases as "pollutants" but defines them as "those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infra red radiation."<sup>198</sup> As of March 1999, eighty-three countries plus the European Union had signed the Kyoto Protocol, and since March 1999 eleven countries acceded to the Protocol.<sup>199</sup> As of April, 2001, 32 developing countries, not including China, India, or Brazil, have ratified the Protocol, and no developed countries have done so.<sup>200</sup>

<sup>191</sup> 31 I.L.M. 849, 872.

<sup>192</sup> *Id.*

<sup>193</sup> 37 I.L.M. 22, 54-56.

<sup>194</sup> Kyoto Protocol, Article 3.1, 37 I.L.M. 849.

<sup>195</sup> *Id.*, Annex B, 37 I.L.M. 42.

<sup>196</sup> United Nations, Conference Of The Parties To The Framework Convention On Climate Change, Kyoto Protocol To The United Nations Framework Convention On Climate Change, U.N. Doc. FCCC/CP/1992/L.7/Add.1 (1997), reprinted in 37 I.L.M.22.

<sup>197</sup> See e.g., Byrd Resolution, S. Res. 98, 105th Cong. 1st. Sess. (1997) (enacted). See also Mitchell F. Crusto, *All That Glitters Is Not Gold: A Congressionally-Driven Global Environmental Policy*, XI GEORGETOWN INT. L. REV. 499 (1999).

<sup>198</sup> FCCC, Art. 1.5.

<sup>199</sup> <<http://www.climateclearinghouse.com>>

<sup>200</sup> *Climate Change: 83 Countries Sign Protocol by March 15 Deadline, U.N. Says*, Daily Env't Rep. (BNA), Mar. 17, 1999, at A-1; FCCC/cp/2000/5/add. 1, for April 2001, p. 9.

On October 20, 1999, President Clinton signed the "Departments of Veterans Affairs and Housing and Urban Development and Independent Agencies Appropriations Act, 2000. The law contains "Knollenberg" funding restrictions that bars the EPA from proposing or issuing rules, regulations, decrees, or orders to implement the Kyoto Protocol.<sup>201</sup> On June 8, 1999, President Clinton issued executive order 13123 that calls on the federal government to reduce greenhouse gas emissions by thirty percent from 1990 levels by 2010.<sup>202</sup> The effort to control GHGs at the international level and the opposition of the U.S. Senate to unilateral control efforts make it difficult, if not impossible, for the EPA to attempt to control such gases without a serious conflict with the Congress.

The Fifth Conference of the Parties (COP-5) to the FCCC took place on October 25 to November 5, 1999, in Bonn, Germany. The COP-5 meeting resolved some twenty technical issues concerning implementation, but it did not address the major unresolved political questions which were left for debate at the sixth COP Conference of the Parties (COP-6) which met in November 2000 in The Hague.<sup>203</sup> At COP-6 the industrialized countries were expected to decide whether to ratify the Kyoto Protocol and to determine how it would be implemented.<sup>204</sup> On November 25, 2000, however, the negotiations broke down and the session was suspended.<sup>205</sup> The Parties have scheduled a resumed COP-6 for July 2001 in Bonn, Germany. However, since November President Bush has indicated that he will not submit the Protocol to the Senate, citing economic reasons, lack of developing country commitments, and S. Res. 98.

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<sup>201</sup> FY 1999 Appropriations for EPA Environmental Programs and Management, Pub.L. No. 105-276, Title III.

<sup>202</sup> 64 Fed. Reg. 30,851 (1999).

<sup>203</sup> Verna Schmitt-Roschmann, *Climate Change: Bonn Meeting Leaves Major Decisions on Kyoto Protocol for 2000 Discussions*, Daily Env't Rep. (BNA), Nov. 9, 1999, at A-1.

<sup>204</sup> Pamela Najor, *Climate Change: U.S. Shows Little Effort to Reduce Greenhouse Gases*, Environmental Group Say, Daily Env't Rep. (BNA), Oct. 25, 1999, at AA-1.

<sup>205</sup> See *U.S. Participating in Effort to Revive Climate Change Talks*, XI Inside EPA's Clean Air Rep. 25:6 (Dec. 7, 2000).