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STATEMENT OF
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Good morning Madam Chairman and Members of the Senate Committee on Environment and Public Works. I appreciate the opportunity to appear before you today to discuss the Environmental Protection Agency's (EPA) efforts to address the challenges posed by climate change. Today I will speak to you about both the Administration's ongoing work to address climate change and the recent Supreme Court decision in Massachusetts v. EPA.

Introduction

President Bush and the Environmental Protection Agency are firmly committed to taking sensible action to address the long-term challenge of climate change. Long before the Supreme Court issued its decision in Massachusetts v. EPA, the Administration had been implementing aggressive steps to tackle climate change, both domestically and internationally. We will continue to move forward with the President's comprehensive climate change agenda as we consider the ramifications of the Supreme Court's decision.

The President has consistently acknowledged a human contribution to climate change. The President has requested, and Congress has provided, substantial funding for climate change science, technology, observations, international assistance and incentive programs – approximately $35 billion since 2001. Federal programs are helping to further reduce scientific uncertainties associated with the causes and effects of climate change; promoting the advancement and deployment of cleaner, more energy efficient, lower carbon technologies; encouraging greater use of renewable and alternative fuels; accelerating turnover of older, less efficient technology through an array of tax incentives; and establishing numerous international climate partnerships with the world's largest greenhouse gas emitters. Through a comprehensive suite of mandates, incentives, and partnerships, the President's climate change policies are contributing to meaningful progress in reducing the growth rate of U.S. greenhouse gas emissions, even as our population grows and our economy continues to expand.

Administration Climate Strategy

Progress Towards the President's Goal

In 2002 President Bush committed to cut U.S. greenhouse gas intensity by 18 percent through the year 2012. This commitment was estimated to achieve about 100 million additional metric tons of reduced carbon-equivalent ($MMTCO_2$) emissions in 2012, with more than 500 $MMTCO_2$ emissions in cumulative savings over the decade.

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According to EPA data reported to the United Nations Framework Convention on Climate Change (UNFCCC), U.S. greenhouse gas intensity declined by 1.9 percent in 2003, by 2.4 percent in 2004, and by 2.4 percent in 2005. Put another way, from 2004 to 2005, the U.S. economy increased by 3.2 percent while greenhouse gas emissions increased by only 0.8 percent.

To build on the substantial progress in meeting the 18 percent intensity reduction, President Bush has announced four major energy policies in the last two years. In his 2006 State of the Unions Address, President Bush proposed the Advanced Energy Initiative (AEI) - a 22% increase in funding for 2007 for clean-energy technology research to change how we power our homes, business, and cars. The 2008 President's Budget includes $2.7 billion for the AEI, an increase of 26 percent above the 2007 Budget.

This year, in his State of the Union address, the President announced his "20-in-10" initiative, which sets an aggressive new goal for the United States to use 20 percent less gasoline in 2017 than currently projected. As part of this effort, the Administration recently sent legislation to Congress to create an Alternative Fuel Standard (AFS) which would mandate the use of 35 billion gallons of alternative fuel in 2017. Should the AFS become law, it will complement and build upon the Renewable Fuel Standard (RFS), which EPA recently finalized. The AFS would rely on credit, banking and trading mechanisms that EPA developed for the RFS, thereby achieving market efficiencies while ensuring the use of an increasing amount of renewable and alternative fuel by our nation.

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Another component of the 20-in-10 plan is reforming and increasing CAFE standards for cars, and for further increasing light truck and SUV standards. We believe new technologies can be deployed to significantly improve fuel economy without impacting safety. If enacted, this legislation will reduce projected gasoline consumption by up to 8.5 billion gallons in 2017.

When approaching the issue of greenhouse gas emissions from the transportation sector, it should be recognized that 95 percent of such emissions consist of carbon dioxide, with the remaining 5 percent of emissions consisting of nitrous oxide and methane exhaust emissions and hydroflourocarbons from air conditioners. In addressing greenhouse gas emissions from the transportation sector, the President's 20-in-10 plan recognizes that on-board technology to control carbon dioxide emissions from vehicles does not currently exist. Therefore, the 20-in-10 plan addresses two primary factors that can reduce carbon dioxide emissions from vehicles; greatly increasing the use of renewable and alternative fuels and increasing the fuel economy of vehicles.

Fuels, such as cellulosic ethanol, can offset lifecycle greenhouse gas emissions by over 90 percent when compared with gasoline derived from crude oil. Biodiesel can result in the displacement of nearly 68 percent of lifecycle greenhouse gas emissions relative to diesel made from petroleum. Increasing the use of such fuels in the transportation sector has the potential to make substantial reductions in greenhouse gas emissions. For any given fuel, increasing the fuel economy of a vehicle will decrease greenhouse gas emissions. Combining the fuel savings from reforming and increasing CAFE with reductions achieved under the AFS, annual emissions of carbon dioxide from cars and light

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trucks could potentially be reduced by 10 percent -- about 175 million metric tons – or the equivalent of “zeroing out” annual emissions from 26 million automobiles.

As part of the “20-in-10” commitment, the President has also issued an Executive Order in January of this year that directs the government to reduce fleet petroleum consumption by 2 percent annually, increase the use of alternative fuels by at least 10 percent annually, increase the purchase of efficient and flexible fuel vehicles, make government buildings more efficient, and take other steps with regard to improving energy efficiency with respect to the government’s purchase of power. The President’s budget also redirects Department of Transportation funds to a new $175 million highway congestion initiative for state and local governments to demonstrate innovative ideas for curbing congestion. These ideas include congestion pricing, commuter transit services, commitments from employers to expand work schedule flexibility, and faster deployment of real-time traffic information. In just one year, wasted fuel accounts for more than 20 million metric tons of carbon dioxide emissions.

In addition to these initiatives, the President’s Farm Bill proposal includes more than $1.6 billion of additional new funding over 10 years for energy innovation, including bio-energy research, energy efficiency grants, and guaranteed loans for cellulosic ethanol plants.

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U.S. EPA Climate Initiatives

While EPA explores options in response to the recent Supreme Court decision in Massachusetts v. EPA, we will continue to implement the initiatives that have proven effective in reducing greenhouse gas emissions, and which form an integral component of the President's comprehensive strategy to address climate change.

EPA climate programs include a wide array of partnerships, which rely on voluntary measures to reduce greenhouse gas intensity, spur new investments, and remove barriers to the introduction of cleaner technologies. Many of these partnership programs provide near-term solutions that focus on reducing emissions. These programs complement the work of other Federal agencies investing in long-term research and development programs, such as the Department of Energy's (DOE) FutureGen and fuel cell development programs. EPA is also one of many federal agencies participating in the multi-agency Climate Change Technology Program.

In addition, EPA also invests in a long-term global change research and development program. EPA's global change research focuses on understanding the effects of global change (particularly climate change and variability) on air and water quality, ecosystems, and human health in the United States. The goal of the program is to produce timely and useful information and tools that enable resource managers and policymakers to more effectively consider global change issues in decision-making. The program's activities are coordinated with other Federal agencies' climate change research through the U.S. Climate Change Science Program.

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What follows is a brief look at a subset of EPA's climate initiatives, categorized by sector.

Transportation

While transportation is crucial to our economy and our personal lives, it is also a significant source of greenhouse gas emissions. Travel growth has outpaced improvements in vehicle energy efficiency making it one of the leading economic sectors in greenhouse gas emissions. Through a combination of new technology development, voluntary partnerships, consumer information and renewable fuels expansion, EPA is working to reduce greenhouse gas emissions from this sector. By focusing both on vehicles and fuels, these efforts follow the same successful approach the Agency has used to cut emissions from motor vehicles.

Reducing Vehicle Fuel Consumption EPA's SmartWay Transport Partnership is a public-private partnership that aims to reduce greenhouse gas emissions, fuel consumption, and criteria pollutants from ground freight transportation operations. Nearly 500 companies, including some of the nation's largest shippers and carriers, have joined the SmartWay program.

The efforts of these companies, which include the use of fuel efficient technologies and anti-idling practices, will reduce greenhouse gas emissions and fuel consumption. EPA estimates that by 2012, the companies that participate in the SmartWay Transport Partnership will cut carbon dioxide (CO2) emissions by up to 66 million metric tons per year, and nitrogen oxide (NOx) emissions by up to 200,000 tons per year. It will save

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about $9 billion in fuel costs and as much as 150 million barrels of oil per year–enough oil to heat 17 million houses for one year.

EPA also is working to develop and commercialize new, state-of-the-art low greenhouse gas technologies at its National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. EPA invented and patented the world's first full hydraulic hybrid vehicle system, capable of achieving a 40 percent reduction in greenhouse gas emissions and a 60-70 percent improvement in fuel economy.

Promoting Today's Transportation Technologies EPA also is working to maximize the potential of today's fuel-efficient technologies. For example, the recent phase-in of ultra low sulfur diesel fuel opens up new markets for clean diesel passenger cars and pickup trucks. These vehicles are up to 40 percent more efficient than conventional gasoline vehicles, reducing life-cycle carbon dioxide emissions by up to 20 percent.

In addition, EPA has ongoing efforts to keep the public informed about the fuel economy performance of the vehicles they drive. As evidenced by the million plus monthly "hits," the on-line Green Vehicle Guide has proven to be a popular consumer tool to help car shoppers identify the cleanest and most fuel efficient vehicles that meet their needs. EPA recently issued new test methods designed to improve the accuracy of window sticker fuel economy estimates to better reflect what consumers actually achieve on the road. We also redesigned the fuel economy label to make it easier for consumers to compare fuel economy when shopping for new vehicles.

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Ensuring Access to Clean Renewable and Alternative Fuels. The Energy Policy Act of 2005 established the Renewable Fuel Standard (RFS)--a requirement for the use of 7.5 billion gallons of renewable fuels in the U.S. by 2012. EPA recently completed this rulemaking. The U.S. Department of Energy (DOE) now projects that ethanol use will greatly exceed the legal requirement, EPA estimates that the RFS will reduce carbon dioxide equivalent greenhouse gases by 8 to 13 million tons, about 0.4 to 0.6 percent of the anticipated greenhouse gas emissions from the transportation sector in the U.S. in 2012.

Energy Efficiency

EPA has long recognized that energy efficiency offers one of the lowest cost solutions for reducing energy bills, improving national energy security, and reducing greenhouse gas emissions – all while helping to grow the economy through increased electric grid reliability and reduced energy costs in the natural gas and electricity markets.

Energy STAR In 1992 the EPA introduced Energy STAR as a voluntary labeling program designed to identify and promote energy-efficient products. Computers and monitors were the first labeled products. Through 1995, EPA expanded the label to additional office equipment products and residential heating and cooling equipment. In 1996, EPA partnered with the U.S. Department of Energy for particular product categories. The Energy STAR label is now on major appliances, office equipment, lighting, home electronics, and more. EPA has also extended the label to cover new homes and commercial and industrial buildings.

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Through its partnerships with more than 8,000 private and public sector organizations, Energy STAR delivers the technical information and tools that organizations and consumers need to choose energy-efficient solutions and best management practices. Over the past decade, Energy STAR has been a driving force behind the more widespread use of such technological innovations, such as LED traffic lights, efficient fluorescent lighting, power management systems for office equipment, and low standby energy use. In 2006, Americans, with the help of Energy STAR, saved $14 billion on their energy bills and prevented greenhouse gas emissions equivalent to those of 25 million vehicles – the number of cars in California and Illinois combined.

Energy Supply

In partnership with a variety of federal agencies and other organizations, the Agency is currently engaged in a number of initiatives that foster development and deployment of cleaner energy production technologies. The power generation sector is a critical element in addressing climate change because the combustion of fossil fuels for non-transportation energy uses constitutes roughly 40 percent of the greenhouse gas inventory for the United States, with the majority of these emissions resulting from the burning of coal.

Coal and CO_2 Capture and Storage Coal is an important fuel to achieve energy security and increase economic prosperity in the United States. Currently, about 50 percent of electricity in the United States is generated from coal, and according to DOE, at current rates of consumption, coal could meet U.S. needs for more than 250 years. To achieve our goal of energy security, coal must continue to play a major role in the generation of

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electricity in this country. Carbon dioxide capture and storage can potentially make a significant contribution to reducing greenhouse gas emissions from coal-fired electricity generation, while allowing continued use of our ample coal reserves. To address the potential environmental impact of coal-fired power plants, EPA, DOE, and others are exploring technological innovations that would allow coal to be burned more efficiently and with fewer emissions. Recognizing the importance of advanced coal technology, EPA is working to ensure that these new technologies are deployed in an environmentally responsible manner.

The Administration is investigating the prospects for carbon dioxide capture from power plants and other industrial sources and long-term storage in geologic formations. EPA's role consists in ensuring that carbon capture and storage is developed and deployed in a manner that safeguards the environment. We are currently focusing our efforts on two fronts: (1) partnering with public and private stakeholders to develop an understanding of the environmental aspects of carbon capture and storage that must be addressed for the necessary technologies to become a viable strategy for reducing greenhouse gases; and (2) ensuring carbon dioxide storage is conducted in a manner that protects underground sources of drinking water, as required by the Safe Drinking Water Act.

Combined Heat & Power Partnership Combined Heat and Power (CHP) is an efficient, clean, and reliable approach to generating power and thermal energy from a single fuel source. By installing a CHP system designed to meet the thermal and electrical base loads of a facility, CHP can increase operational efficiency and decrease energy costs, while reducing emissions of greenhouse gases that contribute to climate change. EPA's CHP

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Partnership is a voluntary program that seeks to reduce the environmental impact of power generation. The Partnership works closely with energy users, the CHP industry, state and local governments, and other stakeholders to support the development of new projects and promote their energy, environmental, and economic benefits.

Other Industrial Sectors

A number of EPA's climate initiatives cut across multiple industrial sectors:

Climate Leaders Climate Leaders is an EPA partnership that encourages individual companies and other organizations to develop long-term, comprehensive climate change strategies. Partners develop corporation-wide greenhouse gas inventories, including all emission sources of the six major greenhouse gases (CO2, CH4, N2O, HFCs, PFCs, SF6), set an aggressive corporate-wide greenhouse gas emissions reduction goal to be achieved over 5 to 10 years, report inventory data annually, and document progress toward their emissions reduction goals. Since its inception in 2002, Climate Leaders has grown to include nearly 100 corporations whose revenues add up to almost 10 percent of the United States' gross domestic product and whose emissions represent 8 percent of total U.S. greenhouse gas emissions. Five organizations have achieved their GHG reduction goals – Baxter International, General Motors Corporation, IBM Corporation, National Renewable Energy Laboratory and SC Johnson.

High GWP Gas Voluntary Programs EPA has a set of voluntary industry partnerships that are substantially reducing U.S. emissions of high global warming potential (high GWP)

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gases. These synthetic gases - including perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulfur hexafluoride (SF6) - are manufactured for commercial use or generated as waste byproducts of industrial operations. Some of these gases have valuable uses as substitutes for ozone depleting substances. However, some species of these gases, while released in small quantities, are extremely potent greenhouse gases with very long atmospheric lifetimes. The high GWP partnership programs involve several industries, including HCFC-22 producers, primary aluminum smelters, semiconductor manufacturers, electric power companies and magnesium smelters and die-casters. These industries are reducing greenhouse gas emissions by developing and implementing cost-effective improvements to their industrial processes. To date, these voluntary programs have achieved significant emission reductions and industry partners are expected to maintain emissions below 1990 levels beyond the year 2010.

International Efforts

EPA's global leadership on climate change extends not only to our suite of domestic programs, but also to our pioneering and effective international partnerships.

Methane to Markets Partnership The United States launched the Methane to Markets Partnership in November 2004 with active participation from EPA, DOE, the U.S. Agency for International Development, and the State Department. The Methane to Markets Partnership is a multilateral initiative that promotes energy security, improves environmental quality, and reduces greenhouse gas emissions throughout the world. The Partnership consists of 20 Partner countries, and involves over 350 private sector and other

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government and non-governmental organizations that participate through a Project Network.

Under the Partnership, member countries work closely with private sector development banks, and other governmental and non-governmental organizations to promote and implement methane recovery and use opportunities in four sectors: oil and gas systems, underground coal mines, and landfills and animal waste management systems. Capturing and using "waste" methane not only provides an additional energy source that stimulates economic growth but also reduces global emissions of this powerful greenhouse gas. The United States has committed up to $53 million for the first five years of the Partnership. EPA estimates that this Partnership could recover up to 500 billion cubic feet of natural gas (50 $MMTCO_2$) annually by 2015.

Asia-Pacific Partnership on Clean Development and Climate (APP) EPA is an active participant in this Presidential initiative, which engages the governments and private sectors in six key nations -- Australia, China, India, Japan, the Republic of Korea and the United States -- that account for about half of the world's economy, energy use and greenhouse gas emissions. Partners are enhancing deployment of clean energy technologies to address their energy, clean development, and climate goals. An example of APP success is the leveraging of a $500,000 U.S. government grant to build the largest coal mine methane power facility in the world in China, which, when completed, will avoid the annual equivalent emissions of one million cars. Another success story is the provision of technical support to China to develop a voluntary energy efficiency label similar to Energy STAR.

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This Administration is meeting unparalleled financial, international and domestic commitments to the reduction of greenhouse gas emissions, and as outlined today, EPA plays a significant role in fulfilling those commitments. The initiatives discussed above represent only a sample of EPA's climate change activities. We will continue to move forward to address climate change in ways that produce meaningful environment benefits and maintain our nation's economic competitiveness.

The recent Supreme Court decision in Masssachusetts vs. EPA comes against the backdrop of this Administration's comprehensive climate policy. My testimony will now discuss the Supreme Court's decision.

The Supreme Court Decision

On April 2, the Supreme Court issued its decision in Massachusetts v. EPA. Prior to the Supreme Court decision, the D.C. Circuit had upheld EPA's denial of a petition to regulate greenhouse gas emissions from new motor vehicles under Section 202(a)(1) of the Clean Air Act. In our briefs before the Supreme Court, we raised three arguments for why the Court should affirm the D.C. Circuit's decision. The Court, in a 5-4 decision, disagreed with our three arguments and reversed the lower court decision.

First, the Court found that Massachusetts had standing to sue and therefore could challenge the petition denial in federal court. Specifically, the Court found that Massachusetts had suffered a risk of injury due to EPA's decision. One noteworthy finding in the majority's opinion is that it gave the State "special solicitude" in establishing the Constitutional

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standing requirements. The dissent, written by Chief Justice Roberts, suggested he found this to be an unjustified expansion of established Constitutional principles and precedent.

Second, the Supreme Court held that the Clean Air Act authorizes EPA to address global climate change through the regulation of greenhouse gas emissions from motor vehicles. Importantly, the Court did not hold that EPA was required to regulate greenhouse gas emissions under Section 202, or any other section, of the Clean Air Act. Rather, the Court merely concluded that greenhouse gas emissions were "air pollutants" under the Clean Air Act, and, therefore, they could be regulated under Section 202 by the EPA subject to certain determinations as discussed below.

The Court also considered whether – given the authority to regulate greenhouse gas emissions under section 202 the Clean Air Act – EPA properly decided not to regulate greenhouse gas emissions from motor vehicles. EPA's decision stemmed in part from expressions of uncertainty as stated in a 2001 National Research Council report on the science of climate change. In denying the petition in 2003, EPA also had articulated additional policy reasons for why even if the Agency had authority to regulate greenhouse gas emissions, it was not appropriate to do so at that time. Those reasons included the Administration's achievements through and investments in technology advancement and voluntary programs, as well as recognition of the global nature of addressing climate change concerns, which must take into account developing nations such as China and India. In contrast, the Court found that EPA could not consider such "policy considerations" as a basis for denying the petition.

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The Court held that, on remand, EPA must decide whether or not greenhouse gas emissions from motor vehicles cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare, or to explain why scientific uncertainty is so profound that it prevents making a reasoned judgment on such an endangerment determination. Importantly, the Court's decision explicitly left open the issue of whether EPA can consider policy considerations when writing regulations in the event EPA were to make an endangerment finding. Indeed, the Court seemed to recognize that EPA has significant latitude with regard to any such regulations.

What is next? The Supreme Court will send the case back to the U.S. Court of Appeals for the District of Columbia. Then the Court of Appeals will most likely issue an order sending the petition back to EPA.

While technically the petition is not yet back before the agency, EPA is exploring and studying the issues raised by the Court's decision, including potential ramifications on other provisions of the Clean Air Act. The Agency fully recognizes the decision as one of the most important environmental law decisions in years--accordingly, we are trying to assure that the Agency is in the best possible position to address its ramifications. However, given the complexity of the decision and the very short time that has elapsed since the Court issued the opinion, at this early date it is impossible today to understand and explain fully how the decision may have any specific impact.

What I can tell you today is the Court left open the question of what procedure EPA is to follow on remand regarding a potential endangerment finding. Any such process should

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be public and transparent and based on the best available science. Additionally, there are various procedural options to consider, including whether we should reopen the public comment period on the petition; whether we should hold a public hearing or hearings; and whether we should, or, are required to, use rulemaking procedures to decide the petition.

In addition, I am aware of a number of other pending petitions, judicial cases, and permitting actions in which parties might reference the Supreme Court's decision in support of or against various positions. For example, the Governor of California two weeks ago met with me and my staff to discuss his views regarding the impact of the decision on California's request for a waiver of Clean Air Act preemption of its standards regulating greenhouse gases from certain motor vehicles. The D.C. Circuit Court of Appeals currently has before it consolidated challenges to 2006 revisions to the Section 111 New Source Performance Standards for utility boilers, and some of these challenges are based on arguments that we should regulate CO2 emissions from the boilers as part of the revised NSPS – this case was severed and stayed pending the Court's decision in Massachusetts v. EPA. There are air permit applications pending before the agency in which similar arguments have been made, and there are cases being litigated in the courts addressing California's and other states' greenhouse gas standards for motor vehicles.

All these actions present complex issues of their own, and I cannot comment at this time on how the Supreme Court's recent decision may or may not relate to them. In my position as Administrator, I also must be mindful that the appropriate process is followed in addressing these issues, which requires that I not prejudge any determinations. At the same time, all these decisions make clear that we must be aware of potential broader

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ramifications. I can assure you that we are focusing not only on the complex issues directly addressed in the Massachusetts v. EPA decision, but on these issues as well.

Conclusion

The Administration remains committed to addressing climate change in a manner that promotes a healthy environment and a healthy economy. Today, I have outlined the myriad of programs, partnerships, and investments the Administration is deploying to meet this challenge. We look forward to analyzing the choices we must make in light of the Supreme Court decision.

Thank you.

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