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Statement of Ben Lieberman
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INTRODUCTION

Good morning, Mr. Chairman and members of this subcommittee, and thank you for inviting me to testify. My name is Ben Lieberman and I am the Director of Air Quality Policy with the Competitive Enterprise Institute, a public policy organization committed to advancing the principles of free markets and limited government. My comments today will focus on those measures I believe Congress should consider to reduce the likelihood and severity of future gasoline price increases such as the one we've experienced in recent months.

Several factors influence the price of gasoline and are responsible for the 50 cent per gallon price rise from the beginning of the year through early June. There's no question that the most important one is the cost of oil. The price per barrel of crude began the year a bit above $30 per barrel, and reached $42 on June 1st before falling back to $36 - $38. Oil is responsible for nearly half the price at the pump, and every dollar

per barrel increase translates into roughly 2.5 cents more per gallon of gas. The jump in oil prices explains more than half of the national average increase from $1.50 to over $2.00 per gallon of gas.

While the global price of oil is the single biggest reason for the gas price spike of 2004, it is also something that is largely beyond Congressional control. There is only so much that can be done to influence such factors as OPEC production quotas, political turmoil and terrorism in oil producing nations, oil worker strikes, and the global demand for oil. Yes, Congress could allow increased domestic oil production, including the billions of barrels of recoverable oil in a small portion of the Arctic National Wildlife Refuge (ANWR).[1] More domestic output would help lower prices at least a little over the long term, but there are factors beyond the price of oil that that Congress should be considering.

Obviously, we don't put oil into our fuel tanks, it first has to be refined into gasoline and diesel fuel. And it is at this step that the federal government has created a regulatory burden that has also contributed to higher prices. Unlike the price of oil, which has fluctuated in recent years and will likely continue to do so, this regulatory burden has steadily increased and is set to get even more stringent in the years ahead. And unlike oil, the cost of these federal regulations is squarely within Congressional control. My testimony will focus on ideas for reducing these regulatory costs.

THE REGULATORY BURDEN

Prior to 1990, the composition of motor fuels was not extensively regulated by the federal government. Other than the phaseout of leaded gasoline and a few other

[1] US Geological Survey, "Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Including Economic Analysis."

measures, the 1970 Clean Air Act (CAA) focused on reducing motor vehicle emissions by regulating the vehicles themselves. This effort has been a success. Even with substantial increases in vehicle miles traveled, overall motor vehicle and industrial emissions have declined substantially, as have ambient pollution concentrations.[2] Cars and trucks on the road today emit only a fraction of the pollution as compared to their counterparts in the 1970s, and these improvements show no signs of slowing down.[3]

The CAA's emphasis changed with the 1990 CAA Amendments, which contain extensive motor fuel requirements.[4] Specialized blends, namely reformulated gasoline (RFG) and oxygenated gasoline, were mandated for certain parts of the country. The CAA also set standards applicable to conventional gasoline, and gave the Environmental Protection Agency broad discretion to create additional fuel specifications.[5]

At the same time, California has continued to set its own gasoline requirements, and many other states and localities have set fuel specifications of their own, often in order to obtain the necessary EPA approval of their State Implementation Plans (SIPs). Each state must have a SIP for meeting the CAA's requirements. With the stringent new National Ambient Air Quality Standard (NAAQS) for ozone, the pressure on some states to switch from conventional gasoline to something else may increase.

More than a dozen different blends are currently required throughout the nation. As recently as the early-1990s gasoline was essentially a national commodity, but today

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[2] Environmental Protection Agency, "National Air Quality and Emissions Trends Report: 2003 Special Studies Edition," Sept. 2003, pp. 1-5.
[3] Joel Schwartz, American Enterprise Institute, "No Way Back: Why Air Pollution Will Continue to Decline," 2003.
[4] 42 USC § 211.
[5] 42 USC § 211(c) ("The Administrator may, from time to time . . . control or prohibit . . . any fuel or fuel additive . . . if in the judgment of the Administrator any emissions product of such fuel or fuel additive causes, or contributes, to air pollution which may reasonably be anticipated to endanger the public health or welfare.")

there are many so-called "boutique fuels" in use. This both adds permanent costs to gasoline, and increases the likelihood of localized shortages and price spikes.

A. Reformulated Gasoline

Perhaps the single most problematic of these provisions is the requirement for RFG, designed to fight smog.[6] RFG is mandated for the nine smoggiest areas of the country (based on 1987-1989 measurements) as well as any other area designated by EPA as in severe non-attainment for ozone.[7] In total, nearly one-third of the nation's fuel supply is RFG.

The RFG program first took effect in 1995. RFG must meet several compositional requirements and performance standards designed to make it cleaner burning than conventional fuels. In addition, there are separate RFG formulations for northern states and southern states, and summer-specific requirements applicable between June 1 and September 15th of each year.

The transition from winter to summer grade RFG is particularly challenging, especially after the requirements for RFG became more stringent in 2000 (RFG II). The introduction of RFG II was identified by the Federal Trade Commission as one of the primary factors behind the Midwest price spike in the spring of 2000.[8] It likely contributed to a similar price spike the following year.

In recent months, RFG has averaged 10 to 20 cents per gallon more than conventional gas, though part of the difference is due to factors other than higher costs of

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[6] 42 USC § 211(k).

[7] RFG is required in all or parts of California, Connecticut, Delaware, District of Columbia, Georgia, Illinois, Indiana, Louisiana, Maryland, New Jersey, New York, Pennsylvania, Texas, Virginia, and Wisconsin. Environmental Protection Agency, "Reformulated Gasoline: Map of Current RFG Areas and County Listings by State," available at http://www.epa.gov/otaq/rfg/whereyoulive/htm.

[8] Federal Trade Commission, "Midwest Gasoline Price Investigation," March 29, 2001.

producing RFG.[9] As with many specialized blends, RFG adds to consumer costs in other ways as well, most significantly by delivering 1.5 to 2.0 percent lower fuel economy as compared to conventional gasoline.[10]

Despite the higher cost, there are questions about the environmental benefits of RFG. Although mandated primarily to help reduce ozone, it is unclear, despite nearly a decade of use, whether RFG has made a difference. A 1999 National Research Council report concluded that "[a]lthough long-term trends in peak ozone in the United States appear to be downward, it is not certain that any part of these trends can be significantly attributed to the use of RFG."[11]

Beyond its questionable air quality record, RFG has caused water contamination concerns. The CAA requires RFG to contain 2 percent oxygen content by weight. This necessitates the addition of so-called oxygenates, either methyl tertiary butyl ether (MTBE) or ethanol. Compared to ethanol, MTBE proved cheaper and easier to incorporate into the fuel supply and became the oxygenate of choice in 85 percent of RFG. Only a few Midwestern markets, including Chicago and Milwaukee, initially chose ethanol as the oxygenate. But due to concerns about MTBE contamination of water supplies, that number has increased.

In 1999, EPA issued a report calling for reductions in MTBE use in fuels due to its effect on water supplies.[12] California, New York, Connecticut and other states have

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[9] Energy Information Administration, "Retail Gasoline Prices by Region by Grade by Formulation," available at: http://www.eia.doe.go_v/oilgas/petroleum/data_publications/wrgp/prices_by_region_by_grade_by_formulation.html

[10] Energy Information Administration, "Demand and Price Outlook for Phase 2 Reformulated Gasoline, 2000," p. 17.

[11] National Research Council, "Ozone Forming Potential of Reformulated Gasoline," 1999, p. 4.

[12] Environmental Protection Agency, "Achieving Clean Air and Clean Water: The Report of the Blue Ribbon Panel on Oxygenates in Gasoline," September 15, 1999.

since acted to ban the use of MTBE. However the federal RFG mandate and its 2 percent oxygen content requirement remain in place. Thus, these states have replaced MTBE with ethanol. The pending energy bill would eliminate the 2 percent oxygen content requirement entirely.

B. Other Requirements

The winter oxygenated fuels program has been in place since 1992 and is required in those areas not in attainment with the NAAQS for carbon monoxide.[13] Though the carbon monoxide problem is rapidly diminishing (and in fact was already doing so in the years before oxygenated gas was introduced) it is still used in a number of markets, including some that must also comply with the RFG mandate.[14]

Even conventional gasoline is subject to several requirements, and its composition varies with geographic location and time of year.[15]

Between conventional and reformulated gasoline are a number of fuels unique to particular states or metropolitan areas within states. Although smog has been declining for decades, many states still have areas not in attainment with the federal ozone standard. In several instances, these states faced difficulties obtaining the required federal approval for their ozone SIPs if they used conventional gas. Since these states did not want to be saddled with RFG and its strict requirements, they devised intermediate

[13] 42 USC § 211(m).
[14] Note 2, at 9-12; Environmental Protection Agency, "State Winter Oxygenated Fuel Program Requirements for Attainment or Maintenance of CO NAAQS," October 2001, available at http://www.epa.gov/otaq/regs/fuels/oxy-area.pdf.
[15] 42 USC §211 (c) and (h); Environmental Protection Agency, "Guide on Federal and State RVP Standards for Conventional Gasoline Only," March 2000.

blends, typically requiring either lower Reid Vapor Pressure (RVP, a measure of fuel volatility) and/or lower sulfur content than conventional gasoline.[16]

C. The Balkanizing Effect

A consumer buying gas in an area using RFG or another specialized blend must pay the added costs of that blend. In addition, all drivers pay at least a little more because of the balkanizing effect of so many distinct gasoline recipes simultaneously in use. Several of these blends have to be separately refined, stored and shipped.[17] This adds further strain to an already-stretched motor fuels infrastructure.

The balkanizing effect has also increased the likelihood of shorter-term price spikes in specific markets. In 1999, the EIA noted that "the proliferation of clean fuel requirements over the last decade has complicated petroleum logistics," and predicted that "additional clean fuels programs could make the system more vulnerable to local outages and price spikes."[18] This has proven to be the case, especially in California and the upper-Midwest.[19]

D. The Expanding Regulatory Burden

While the existing fuel rules remain in effect, new ones are constantly being added. 2004 is the first year of new low-sulfur requirements for gasoline.[20] The state-level MTBE bans in California, New York, and Connecticut also took effect this year. Each new rule not only adds to the long-term cost of gasoline, but can create short-term

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[16] Environmental Protection Agency, "Staff White Paper: Study of Unique Gasoline Fuel Blends ('Boutique Fuels'), Effects on Fuel Supply and Distribution and Potential Improvements," October 2001, pp. 13-15.
[17] Note 10, at 8-12.
[18] Note 10, at 8.
[19] Energy Information Administration, "Gasoline Type Proliferation and Price Volatility," Sept. 2002, pp. 4-7.
[20] 64 Fed. Reg. 26,004 (May 13, 1999).

transitional costs as the bugs are worked out during the first few months of implementation.

Looking further out, states have until 2007 to come up with plans for dealing with the new ozone NAAQS. Last April, EPA announced that 474 counties nationwide are not in attainment with the new standard.[21] This includes nearly 100 counties currently in compliance with the previous ozone standard, and others likely to have met this standard within the next few years. Non-attainment states have three years to revise their SIPs, and some currently using conventional gas may have to adopt low-RVP or another specialized blend in order to secure EPA approval.

Given the open-ended CAA language regarding EPA's authority to regulate motor fuels, as well as the possibility of environmental organizations filing lawsuits forcing the agency's hand, more fuel regulations are entirely possible.

New statutory provisions, including those that attempt to deal with global warming, could also add to the burden on the driving public. Last year, the Climate Stewardship Act, S. 139, was defeated in the Senate by a vote of 55-43. This bill would regulate emissions of carbon dioxide, the main anthropogenic greenhouse gas. Transportation accounts for nearly one third of such emissions.[22] Thus, any serious effort to control carbon dioxide would add significantly to the cost of motor fuels. An amended version of the Climate Stewardship Act, SA 2028, has recently been introduced, and may come to a Senate vote in the near future. An EIA analysis of this bill estimates that it would add 9 percent to the price of gasoline by 2010 and 19 percent by 2025, though the

[21] Environmental Protection Agency Press Release, "EPA Issues Designations on Ozone Health Standards," April 15, 2004.
[22] Stacy C. Davis, Office of Transportation Technology, US Department of Energy, "Transportation Energy Data Book," 1999, p. 3-7, table 3.6.

analysis concedes considerable uncertainty.[23] A House of Representatives version, H.R. 4067, has also been introduced.

IDEAS FOR REFORM

The 1990 CAA Amendments were a bipartisan effort. Based on what we have learned from fourteen years' experience, it is time for Congress to review and revise the law. Even if a major overhaul of the CAA motor fuel provisions is too ambitious a task right now, some targeted streamlining of a few provisions could provide benefits to the driving public.

The easiest place to start is by eliminating those provisions, most notably the 2 percent oxygen content requirement for RFG, that increase the cost of gasoline without providing an appreciable environmental benefit. Another logical target is any specialized blend, such as winter oxygenated fuel, that has outlived its usefulness. Other motor fuel provisions could be retained but modified to achieve the same air quality improvements in a more cost-effective manner.

As a guiding principle, the federal government should limit its role to setting environmental end goals for motor fuels, but should not go so far as to dictate specific ingredients and recipes by which those goals are met. This guiding principle could go a long way towards adding needed flexibility to the system. For this reason, the motor fuels provisions in the energy bill can best be described as a mixed bag. The proposed elimination of the 2 percent oxygen requirement for RFG is a step in the right direction, but the proposed mandate that a specified amount of ethanol be added to the fuel supply is a step in the wrong direction.

[23] Energy Information Administration, "Analysis of Senate Amendment 2028, the Climate Stewardship Act of 2003," May 2004, p. 5.

Just as important as streamlining the existing requirements is holding the line against potentially expensive new ones. Debate over any new fuels provisions, whether additional CAA rules, an ethanol mandate, or new laws designed to combat global warming, must take into account realistic assessments of the likely impact on the price of gasoline - something that has not always happened in the past.

Most of the opposition to gasoline regulatory reform comes from those arguing that any changes will have an adverse impact on air quality. These concerns are unfounded. EPA's own data demonstrates that both motor vehicle and overall emissions controlled under the Clean Air Act have declined substantially in recent decades.[24] For example, emissions of nitrogen oxides and volatile organic compounds, the two automotive pollutants responsible for smog, reached a record low in 2003, according to EPA.[25] And, although these trends are continuing, it is also worth noting that they have not accelerated as a result of the experiment in boutique fuels initiated during the 1990s.

Despite past and inevitable future increases in vehicle miles traveled, emissions will continue their long-term downward trend.[26] By one estimate, based on data from vehicle inspection programs and on-road remote sensing and tunnel studies, motor vehicle emissions are declining by 5 to 15 percent annually, while miles traveled are increasing by about 1 to 3 percent per year.[27] Fleet turnover, from older and dirtier

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[24] Note 2, at 1-5.
[25] Environmental Protection Agency, "The Ozone Report: Measuring Progress Through 2003," April 2004, p. 5.
[26] Andrew J. Kean et al., Society of Automotive Engineers, "Trends in Exhaust Emissions from In-Use California Light-Duty Vehicles, 1994-2001," 2002; Sajal S. Pokharel et al., "Emissions Reductions as a Result of Automobile Improvement," Environmental Science and Technology, vol. 37, 2003, pp. 5097-5101.
[27] Note 3, at 19.

vehicles to cleaner new ones, has a considerably greater overall impact on emissions than fuel changes.[28]

The new Tier 2 standards, which apply to every on-road vehicle and will be phased in over the next several years, ensure that these trends will continue for decades to come.[29] Under these standards, a typical new car or truck, operating on any fuel, will be 70 to 90 percent cleaner than the one it replaces. Indeed, a Tier 2 vehicle operating on conventional gas will have lower emissions than a mid-1990s vehicle operating on any specialized blend.

In sum, there is plenty of room to make gasoline regulations more consumer-friendly, and to do so within the context of continued improvements in air quality.

Fortunately, gasoline prices have been coming down in the past few weeks, and we can only hope this trend continues. But even if we have turned the corner on the gas price spike of 2004, this is no time for complacency. We have seen enough episodes of high gas prices in recent years to know that they will return. Streamlining and simplifying the still-growing regulatory burden should be part of an ongoing effort to ensure that future gasoline prices are as affordable as the market will allow.

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[28] Kean et al., note 26, at 4.
[29] 65 Fed. Reg. 6,698 (February 10, 2000); 66 Fed. Reg. 5,002 (January 18, 2001).