



**WRITTEN STATEMENT OF THE**

**AMERICAN FUEL & PETROCHEMICAL MANUFACTURERS**

**AS SUBMITTED TO THE**

**SUBCOMMITTEE ON ENERGY AND POWER**

**Committee on Energy and Commerce**  
**United States House of Representatives**

**For a Hearing on**

**The “Energy Consumers Relief Act of 2013”**

**April 12, 2013**

## **Testimony Summary of Brendan Williams, Vice President of Advocacy of the American Fuel & Petrochemical Manufacturers (AFPM)**

House Committee on Energy and Commerce – Subcommittee on Energy and Power  
Hearing on the “Energy Consumers Relief Act of 2013”

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This hearing comes at a critical time for energy producers and the consumers they serve. There are many reasons to be optimistic about the future of U.S. energy production. For the first time in modern memory, the national conversation about our energy potential has shifted from one of scarcity to one of abundance.

As a result, U.S. workers now face the prospect of manufacturing jobs returning to the U.S. as abundant and affordable energy attract billions of dollars in planned new investment. Such developments are happening against a backdrop of tremendous investment and advances in environmental performance within the refining industry.

Last week, the Environmental Protection Agency (EPA) reported that energy-related emissions are at their lowest since 1994 and that refineries reduced emissions by 13.5 percent since 2006. A peer-reviewed report from Sage Environmental Consulting likewise found that refinery emissions of criteria air pollutants decreased as much as 80 percent between 1990-2010.

Despite such progress, the EPA is advancing an onslaught of costly regulations that provide minimal, if any, benefit. EPA pushes such an agenda forward with limited transparency, questionable economic analysis, and without consideration for inherent conflicts among major energy rules. These regulations, some of which are completely discretionary, threaten to chill investment and require companies to divert capital from job-creating projects to comply with unnecessary and burdensome regulations.

The Energy Consumer Relief Act is a common sense measure that would inject transparency and scientific rigor back into the regulatory process.

In relation to regulatory conflicts, EPA’s Tier 3 standards will impose costly new gasoline regulations on consumers, while providing minimal, if any, benefit. In addition to potentially adding 6 to 9 cents per gallon to the cost of producing fuel, it will require refiners to increase GHG emissions.

Additionally, new GHG tailpipe standards are leading to lower gasoline demand, which creates conflicts with the federal Renewable Fuels Standard (RFS). Meeting both requirements will lead to more ethanol being forced into the fuel supply than existing engines and refueling infrastructure can safely accommodate. Studies also show the RFS could lead to increases in emissions EPA specifically regulates in other rules.

Planned GHG regulations for refineries, as well as upcoming ozone requirements layer on additional all cost, little-to-no benefit regulations that will have significant cost implications for the fuel supply and manufacturers.

The Energy Consumers Protection Act will help better ensure energy costs and regulatory conflicts are given appropriate consideration in relation to future EPA regulations. Independent and thorough review by federal departments with expertise in energy and economic ramifications of regulations will serve as a check against EPA overstating or double counting benefits, minimizing costs.

Most important, by requiring a report to Congress, it will increase transparency and give policymakers and consumers alike the opportunity to better understand the tradeoffs between increased regulation and economic activity.

The American Fuel & Petrochemical Manufacturers (AFPM) appreciates the opportunity to express its support for the Energy Consumers Relief Act. AFPM is a trade association representing high-tech American manufacturers of virtually the entire U.S. supply of gasoline, diesel, jet fuel, other fuels and home heating oil, as well as the petrochemicals used as building blocks for thousands of products vital to everyday life. AFPM members make modern life possible and keep America moving and growing as we meet the needs of our nation and local communities, strengthen economic and national security, and support 2 million American jobs.

This hearing comes at a critical time for energy producers and the consumers they serve. There are many reasons to be optimistic about the future of U.S. energy production. For the first time in modern memory, the national conversation about our energy potential has shifted from one of scarcity to one of abundance. Innovation and feats in engineering—rather than mandates and subsidies—now allow U.S. oil and gas producers to develop energy from areas once considered impossible. Last year, the U.S. Energy Information Administration (EIA) reported that the U.S. is on track to become the world’s largest oil producer, surpassing Russia and Saudi Arabia. Due in large part to these innovations, imports of oil as a percent of demand have already fallen from 60 percent in 2006 to 40 percent in 2012.<sup>1</sup>

As a result, U.S. workers now face the prospect of manufacturing jobs returning to the U.S. as abundant and affordable energy attract billions of dollars in planned new investment.<sup>2</sup> Such developments are happening against a backdrop of tremendous investment and advances in

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<sup>1</sup> Energy Information Administration, *Monthly Energy Review*, Table 3.3a  
[http://www.eia.gov/totalenergy/data/monthly/pdf/sec3\\_7.pdf](http://www.eia.gov/totalenergy/data/monthly/pdf/sec3_7.pdf)

<sup>2</sup> See Michael Birnbaum, *European Industry Flocks to U.S. to Take Advantage of Cheaper Gas*, Washington Post, April 1, 2013; Jack Kaskey, *LyondellBasell May Spend \$1 Billion to Boost Production*, Bloomberg, March 13, 2013.

environmental performance within the refining industry. Last week, the Environmental Protection Agency (EPA) reported that energy-related emissions are at their lowest since 1994 and that refineries reduced emissions by 13.5 percent since 2006.<sup>3</sup> Moreover, the refining sector spent \$132 billion since 1990 to improve environmental performance.<sup>4</sup> A peer-reviewed report from Sage Environmental Consulting likewise found that refinery emissions of criteria air pollutants decreased as much as 80 percent between 1990-2010.<sup>5</sup>

Despite such progress, the EPA is advancing an onslaught of costly regulations that provide minimal, if any, benefit. EPA pushes such an agenda forward with limited transparency, questionable economic analysis, and without consideration for inherent conflicts among major energy rules. These regulations, some of which are completely discretionary, threaten to chill investment and require companies to divert capital from job-creating projects to comply with unnecessary and burdensome regulations. The Energy Consumer Relief Act is a common sense measure that would inject transparency and scientific rigor back into the regulatory process. The legislation does not stop EPA's ability to regulate. It would simply inject more rigorous review of the most costly regulations and foster more robust public debate about the costs and benefits of such proposals.

One need look no further back than 2012 to understand the impact of the regulatory environment on the nation's refineries. Until new investors and agreements between businesses, labor and policymakers, several Philadelphia region refineries faced the prospect of closing. In

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<sup>3</sup> Edward Felker, *Energy Sector Carbon Output Declined Again Last Year*, Energy Guardian, April 5, 2013.

<sup>4</sup> American Petroleum Institute, *Environmental Expenditures by the Oil and Gas Industry 1990-2011*, December 2012.

<sup>5</sup> Thomas. P. Nelson, *An Examination of Historical Air Pollutant Emissions from US Petroleum Refineries*, Sage Environmental Consulting (2012).

discussing the many factors behind its refinery closures, one of the companies noted that environmental regulatory costs consumed approximately 15 percent of its operating budget. Similarly, over the ten years prior to selling its Trainer refinery in Philadelphia, ConocoPhillips<sup>6</sup> invested 100 percent of its cash flow to meet regulatory requirements before making the difficult decision to idle the plant and put it up for sale. While the Philadelphia area situations were resolved, that has not always been the case. A Hovensa refinery that closed in the U.S. Virgin Islands was located in a region already in attainment with the Clean Air Act. EPA nevertheless required the company to spend \$700 million replacing turbines. After losing \$1.3 billion over three years due to several factors, the refinery could not afford the additional regulatory compliance costs and decided instead to close its doors.

## **2013 Regulatory Environment**

A brief examination of the regulatory landscape underscores the high-cost, conflicting nature of the U.S. regulatory regime. For example, the following three current regulations are inherently in conflict and are, or will, disadvantage consumers—Tier III fuel standards, the Renewable Fuels Standard (RFS), and Corporate Average Fuel Economy (CAFE) standards.

On March 29, 2013, EPA proposed its long anticipated Tier III fuel standards, requiring refiners to remove trace amounts of sulfur from gasoline despite the fact that the industry already removed 90 percent of the sulfur in gasoline since 2004. The incremental reduction to remove the trace amounts of sulfur will cost refiners almost as much as the original reduction, which removed 15 times more sulfur than the current regulation will require. While not completely

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<sup>6</sup> ConocoPhillips has since split into separate upstream and refining companies.

analogous to the parameters of the proposed rule, a Baker and O'Brien analysis estimates that a sulfur only reduction will cost refiners \$10 billion in capital costs and \$2.4 billion a year in operating costs—equating to 6 to 9 cents per gallon in additional cost. EPA has still failed to sufficiently demonstrate the justification for this discretionary rule.

Incongruously, as a result of the equipment needed to remove additional sulfur, Baker O'Brien estimates that greenhouse gas emissions will increase by 1 to 2.3 percent as a result of the Tier III rule. This occurs because required technologies such as hydrotreating result in increased energy consumption with associated greenhouse gas and other emissions. In addition, the production of extra hydrogen necessary for the hydrotreater results in an increase in GHG emissions because the hydrocarbon source (natural gas or refinery fuel gas) must be “cracked” to recover the hydrogen - releasing large amounts of CO<sub>2</sub>. Therefore, a further gasoline sulfur reduction standard will increase the carbon footprint at refineries. Such carbon emission increases conflict with EPA's attempts to regulate GHGs under the Clean Air Act.

EPA characterizes this proposed rule as necessary for public health and as helpful to automakers in meeting increasing fuel efficiency standards. These are both laudable goals, but unfortunately EPA does not show all of its math, so the public and other policy makers cannot appropriately judge the true costs and true benefits. For example, as part of the proposed rule, EPA includes new tailpipe emissions standards. Yet in its recital of benefits arising from Tier III, EPA does not delineate among the tailpipe, evaporative, or gasoline sulfur standards. If the benefits flow primarily from the tailpipe emission reductions, the fuel sulfur reduction is tremendously expensive with little return on public health. We already know that mobile source

emissions have declined because of the Tier 2 standards, and this will continue because not all cars and light-duty trucks are Tier 2 vehicles. However, the air quality benefits of Tier III will be much smaller than Tier 2. For ozone, this reduction is estimated to be no more than 0.5 ppb by 2022 compared to a 12 ppb reduction from Tier 2, or one twentieth of the reduction achieved from moving to Tier 2.<sup>7</sup> Stated differently, Tier 2 will help reduce ozone emissions 10 percent below 2008 levels by 2022. Moving to Tier III would only achieve another 0.7 percent reduction. In other words, EPA proposed Tier III before all the benefits of Tier 2 have been realized, the cost of both rules will be similar despite Tier III yielding only a fraction of the benefit of Tier 2, and despite the increase in GHG emissions stemming from Tier III compliance, dampening the impact of other EPA programs.

EPA claims that the proposed Tier III standard is necessary for states to attain the existing national ambient air quality standards (NAAQS). Last year, EPA promulgated nonattainment areas for the 2008 ozone NAAQS. Most (36 are marginal out of 46 total nonattainment areas) must be in compliance by 2015 based on monitoring data for 2013, 2014 and 2015. Therefore, EPA's stated justification for Tier III is suspect since it will not help the 36 marginal nonattainment areas because it will not be effective until 2017.

Similarly, EPA contends that Tier III will help automakers meet CAFE standards by helping catalytic converters to run more efficiently. Again, EPA declines to place a value on the incremental efficiency gain and does not allow consumers to consider whether 9 cents per gallon is worth (hypothetically) a tenth of a mile in fuel economy gains. Moreover, EPA should have

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<sup>7</sup> ENVIRON, *Effects of Light-duty Vehicle Emissions Standards and Gasoline Sulfur Levels on Ambient Ozone*, September 2012.

analyzed the ability of auto manufacturers to achieve CAFE in the context of that earlier rulemaking. If a fuel change is necessary for CAFE standards to be achieved, then EPA had the obligation to incorporate that analysis and the costs that flow from it into its CAFE rulemaking. This is a perfect example of the problems caused by the agency's silo approach to rulemaking.

CAFE standards will likewise create an inherent conflict with the RFS that will disadvantage consumers. In particular, domestic gasoline demand will continue to decline in large part due to fuel efficiency standards. However, the volumes of ethanol mandated in the RFS will continue to increase to a point where there will be a de facto government mandate for transportation fuels to contain more than 10 percent ethanol. When the RFS was passed in 2007, EIA projected gasoline demand would be nearly 150 billion gallons in 2012 and nearly 155 billion gallons in 2022. Instead, U.S. consumers used 134 billion gallons of fuel in 2012 and EIA projects only 124 billion gallons of demand in 2022. The RFS grows to a 36 billion gallon consumption mandate by 2022—including 15 billion gallons of corn ethanol and 21 billion gallons of advanced biofuels, which includes 16 billion gallons of cellulosic biofuels, 1 billion gallons of biomass based diesel, and other advanced biofuels. The 10 percent limit at which ethanol can safely be introduced into the fuel supply is called the “blendwall.”

A recent NERA report highlighted that breaching the blendwall alone will significantly increase gasoline costs.<sup>8</sup> Additionally, several groups have expressed concern over the adverse impacts higher ethanol blends in the fuel supply could have on consumers. These problems range from potential engine damage, to food price inflation, to lower fuel economy and increased

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<sup>8</sup> NERA Economic Consulting, *Economic Impacts Resulting from Implementation of RFS2 Program*, (October 2012).



emissions. Several comments the Committee has and will receive on its RFS white papers – including those AFPM recently submitted - go in detail about these individual problems. AFPM's comments detail problems with the blendwall and E15, but one particular aspect is worth noting. A 2009 study by the Environmental Working Group (EWG) concluded that a higher ethanol blend may damage non-road engines and emission control systems, worsen health risks from air pollution, pose safety risks and higher fuel costs, and compromise performance of non-flex-fuel vehicles.<sup>9</sup> EWG found that E15 increases emissions of acetaldehyde, PM<sub>2.5</sub> particulate air pollution, ground-level ozone and other toxic air pollutants.<sup>10</sup> These pollutants are precisely the targets of other regulations, notably national ambient air quality standards discussed below.

In short, the conflicts between the RFS and CAFÉ will force more ethanol into the fuel supply than existing engines and refueling infrastructure can safely accommodate. This reality will create significant fuel supply and consumer cost concerns. Increased vehicle purchasing costs, combined with requirements that will force consumers to pay more per mile for fuel could have significant economic impacts, while potentially increasing emissions and resulting in costly repairs.

### **Anticipated Regulations**

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<sup>9</sup> Olga V. Naidenko, Ph.D., *Ethanol-Gasoline Fuel Blends May Cause Human Health Risks and Engine Issues*, Environmental Working Group at 1 (2009).

<sup>10</sup> *Id.* at 3.

Despite substantial progress in industry environmental performance and existing regulatory programs to combat greenhouse gas emissions, President Obama indicates that he plans to move forward with additional unilateral measures to layer on new regulations.

“But if Congress won’t act soon to protect future generations, I will. I will direct my Cabinet to come up with executive actions we can take, now and in the future, to reduce pollution, prepare our communities for the consequences of climate change, and speed the transition to more sustainable sources of energy.”

-President Obama, 2013 State of the Union Address

Although this statement is not surprising, for those industries already navigating an onerous, conflicting and costly maze of regulations, it is nonetheless disappointing. It also underscores the need for more robust public debate that the Energy Consumers Protection Act would afford. In addition to ongoing compliance challenges with the aforementioned regulations, AFPM anticipates EPA will seek to promulgate at least two costly new environmental standards: revised ozone national ambient air quality standards (NAAQS) and refinery greenhouse gas New Source Performance Standards (NSPS).

This year, the Clean Air Scientific Advisory Committee (CASAC) will advise the EPA Administrator on new ozone NAAQS, following the five-year review process that started in 2008. The Clean Air Act (CAA) calls on EPA to revise NAAQS every five years “as may be

appropriate” in accordance with sections 108 and 109(b) of the CAA. NAAQS regulates six criteria pollutants, namely ozone, carbon monoxide, lead, sulfur dioxide (“SO<sub>2</sub>”), nitrogen oxides (“NO<sub>x</sub>”) and particulate matter (“PM”). In relation to the ozone NAAQS, EPA seeks to control emissions of volatile organic compounds (“VOCs”) and NO<sub>x</sub>, because they are ozone precursors. Primary NAAQS must be set at a level “requisite to protect the public health” with “an adequate margin of safety.” Secondary NAAQS must specify a level of air quality “requisite to protect the public welfare from any known or anticipated adverse effects.” Failure to achieve NAAQS has significant ramifications for states and localities. If an area is designated “non-attainment,” it becomes subject to several new regulations, such as a requirement to use reformulated gasoline in a given area, much more stringent stationary source permitting, and required implementation of “Reasonably Achievable Control Technology” (“RACT”) on major stationary sources emitting VOCs and NO<sub>x</sub>. The potential fuel modifications alone could have significant cost ramifications for businesses and consumers. Depending on the level of non-attainment severity, states and localities can actually be denied federal transportation funding.

EPA finalized a new NAAQS ozone standard of 0.075 ppm in 2008 following substantial and rigorous scientific review. This standard itself is extremely stringent and will be difficult to meet. Further tightening of already stringent ozone levels with expedited compliance schedules could have a significant and adverse impact on all aspects of the economy. A Manufacturers Alliance study found that lowering the standard to 0.060 ppm would cost over \$1.6 trillion and could lead to the loss of 7.2 million jobs economy wide over the next decade. EPA’s own numbers indicated the cost of a revised ozone NAAQS standard would range from \$19-\$90 billion annually. To emphasize how stringent a 0.060 ppm standard is, Yellowstone National

Park, with no industrial development in it or for miles around, would be nonattainment if the standard were set that low.

Moreover, ambient air quality is, and has been, dramatically improving, even as the nation's economy has grown. According to the EPA, between 1980 and 2008 total emissions of the six principal air pollutants has dropped 54 percent. Measures of ambient concentrations of ozone dropped 25 percent in that time, while national GDP increased 126 percent, vehicle miles traveled were up 91 percent and energy consumption increased 29 percent. A tighter standard could have significant adverse health and welfare impacts associated with continued unemployment and economic decay.

In addition to GHG and emissions controls implemented through CAFE, RFS, Tier III, NAAQS, and other policies not mentioned herein, in late 2010 EPA agreed to a settlement with environmental groups and several states that will require EPA to propose regulating GHGs under a section of the CAA that calls for the creation of New Source Performance Standards (NSPS). EPA has proposed a GHG NSPS for electric utilities currently focusing only on new units and still has not reached agreement on a schedule for the refinery GHG NSPS. Under the Clean Air Act, a New Source Performance Standard requirement applies to new, modified and reconstructed, and existing facilities subject to regulation under the act. A GHG NSPS would require any regulated facility to install Best Demonstrated Technology ("BDT") and EPA is required to consider cost in determining BDT.

AFPM members have concerns with this action. The Agency continuously mentions that utilities and refiners together account for upwards of 40 percent of GHG emissions. This statement is misleading, because the overwhelming majority of that figure is attributable to utility emissions (2.4 billion tons for electricity generation versus 183 million tons annually for refineries). Stationary source refinery GHG emissions comprise roughly only 4 percent of our nation's GHG emissions.

Finally, it is important to remember that the Clean Air Act was never designed or intended to regulate carbon emissions. It is, at best, a blunt instrument to address an issue that should remain within the purview of Congress, which answers to constituents and is in a better position to understand the real-world impacts of such policies. Congress has, on numerous occasions, explicitly rejected new carbon control legislation.

### **Energy Consumers Protection Act**

The foregoing examples highlight a few of the current and upcoming regulations AFPM is closely monitoring. Viewed individually, each poses a unique challenge and added cost to refineries. However, collectively, these laws and regulations are often in conflict with each other and their aggregate compliance costs rise exponentially. Reducing emissions to comply with one regulation compels refiners to deal with higher emissions and associated compliance challenges in another.

The Energy Consumers Protection Act will not stop regulatory activity and does not remove EPA's ability to regulate emissions. It is also not specific to fossil fuel regulations. In fact, one can imagine a scenario where a proposed EPA energy regulation would affect the renewables industry. However, independent, and thorough review by federal departments with expertise in energy and economic ramifications of regulations will serve as a check against EPA overstating or double counting benefits, while minimizing costs. Most important, by requiring a report to Congress, it will increase transparency and give policymakers and consumers alike the opportunity to better understand the tradeoffs between increased regulation and economic activity. In short, the bill will act as a check against a "fox guarding the henhouse" scenario in relation to an agency that is incentivized to increase regulation, acting as its own judge of the impact of those regulations.

Finally, in its justification for new regulations, EPA typically claims that the costs of such regulations are only a few pennies per gallon (including its recent Tier III proposed rule). Even if one did not take issue with such rosy estimates (and AFPM takes issue with many), what EPA fails to consider, however, is the cumulative cost those pennies and that of the broader Administration policy limiting energy production and manufacturing. For example, a one cent increase in gasoline prices translates to more than \$1 billion increase in household energy spending that could otherwise be used for other goods and services.<sup>11</sup>

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<sup>11</sup> Bloomberg, *The Impact on U.S. Consumers of Every 1¢ Increase in Gas Prices: \$1 billion*, March 19, 2012 (citing 2011 Deutsche Bank report), accessed April 9, 2013, available at: [http://www.bloomberg.com/portfolio-impact/2012-03-19/the-impact-on-u-s-consumers-of-every-1-increase-in-gas-prices-1-billion.html#what%27s\\_happening](http://www.bloomberg.com/portfolio-impact/2012-03-19/the-impact-on-u-s-consumers-of-every-1-increase-in-gas-prices-1-billion.html#what%27s_happening)

## **Conclusion**

The U.S. is in the midst of an energy revolution. New technology—driven by private sector ingenuity without the benefit of mandates and subsidies—has placed the U.S. in a position to become the world’s largest energy producer, led by the oil and gas industry. The air is cleaner than it has been in decades, driven by continuous improvements in the energy production, fuel and petrochemical manufacturing and vehicle technology. Yet an onslaught of conflicting and costly laws and regulations threatens these positive developments. The Energy Consumer Protection Act, while not stopping EPA’s ability to regulate emissions, would inject more rigorous review of the most costly regulations and foster more robust public debate about the costs and benefits of such proposals. AFPM fully supports the Energy Consumers Protection Act and appreciates the opportunity to share its views.