

***Testimony on the Impacts of Gasoline Additives and Ethanol
on Fuel Supplies and the Environment***

Presented to:

Senate Environmental Resources and Energy Committee

Provided by:

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Chair White, Chair Musto, distinguished members of the Senate Environmental Resources and Energy Committee. Good morning. On behalf of Pennsylvania Secretary of Agriculture Dennis C Wolff, I appreciate the invitation and opportunity to present the issues on ethanol and methyl-tertiary-butyl-ether (MTBE) from the perspective of the Pennsylvania Department of Agriculture. To begin this discussion, I think it is important to recognize the great steps Pennsylvania has taken to decrease our reliance on petroleum and increase our utilization of renewable agricultural energies, further solidifying and providing for our national security.

Governor Rendell believes that the nation's agricultural sector can contribute significantly to meeting our nation's energy needs, and that Pennsylvania's assets give us a unique role in building our nation's energy platform. We must cut our petroleum imports by harvesting energy from the crops grown on American soil – there can be no argument about the sustainability of that strategy. Pennsylvania is taking the lead, and that is demonstrated by the fact that we recently opened our first commercial bio-diesel production facility that will produce two to three million gallons of biofuels. Additionally, with state support, the first East Coast bio-diesel injection blending facility opened in Pennsylvania. We expect within a year to be producing tens of millions of gallons of bio-fuels.

It's obvious that our agriculture economy is a key ingredient in energy independence and Pennsylvania's prosperity. To make sure that we provide for every possible energy option, Governor Rendell created the Renewable Agricultural Energy Council, which is focused on developing and expanding agricultural energy industries in Pennsylvania. Thanks to Governor Rendell and our Pennsylvania General Assembly, we have what many consider to be the nation's most progressive alternative energy portfolio standard, ensuring that 18 percent of all energy generated comes from clean and efficient sources by the year 2020. Benefits include \$10 billion in increased output and as many as 4,000 new jobs for residents over the next 20 years.

While Pennsylvania is a corn deficit state that imports 50% more corn than we produce, we feel that the development of a “destination ethanol plant” is a concept that can provide both economic and environmental benefits to Pennsylvania’s farmers and rural economy.

On the subject of a ban of MTBE, we feel that the lack of federal support for MTBE from a liability standpoint has already caused fuel suppliers to move away from the product as a gasoline additive. MTBE’s ability to move through groundwater systems, along with its odor and potential as a carcinogen, have made it problematic as a fuel additive. Ethanol is a logical alternative due to its favorable energy ratio and its ability to be produced locally. Refiners are choosing ethanol rather than MTBE. MTBE is a possible human carcinogen, according to the U.S. Environmental Protection Agency. There have been previous cases of MTBE water contamination. Ethanol is less hazardous and easier to remediate than MTBE in the event of a spill in the water. Ethanol is non-toxic, however, the scientific community indicated that more study is needed to determine its full environmental effects. Corn yields 2.75 gallons of ethanol per bushel to make it a viable renewable fuel. While 90% of the ethanol is currently made from corn, ethanol can also be produced locally from plant starches, sugars and cellulose. This will help ensure that energy dollars – and jobs - stay within the Commonwealth, as opposed to being spent on fuel from out-of-state suppliers. On the other hand, using ethanol in our gasoline supply at lower volumes (around 10%) may pose some air quality challenges that warrant consideration when developing an ethanol use policy. We will work with the Department of Environmental Protection in assessing these potential impacts.

Ethanol also presents challenges to fuel blenders since it has an affinity for water and thus cannot be transported through existing fuel pipelines. The challenge thus becomes providing enough ethanol for blending with gasoline using predominately rail and truck transport mechanisms. Having enough ethanol at key blending locations around Pennsylvania will be a difficult hurdle for the industry to overcome. Local production would provide locally manufactured sources of ethanol that would help stimulate the local economy by providing jobs, help meet market demands and keeping money in the local economy through local sales. Local corn prices would be improved for producers that chose to sell PA grown corn to the plant with the balance being provided by rail corn just as rail corn supplements local supplies for existing large animal feeding operations.

The benefits do not stop here since the concept of a “destination ethanol plant” (a plant that uses the products produced by it locally) includes improved economics for co-product markets in the East. Pennsylvania’s strong dairy industry uses significant dried distillers grains in dairy rations to provide a substantial protein source in a total ration. Locally produced distillers grains could be sold directly to farmers as a wet ration and the balance dried for sale to feed producers for use in dairy, poultry and hog feed rations. Carbon dioxide that is normally vented to the atmosphere at Midwestern ethanol plants would be captured and sold as a commodity that is valued by Eastern food processing, beverage and industrial markets. Collectively these benefits would improve local agricultural markets without compromising existing crop rotations and conservation programs.

To promote ethanol use, we need to create market stability through incentives that trigger production. Refiners are already making the switch from MTBE to ethanol and terminals and retailers are preparing the infrastructure. While initial production plants would evolve through sound business planning and capital investments, the incentives would ensure that additional ethanol production would have good market stability. For example, incentives that would stimulate annual production over 100 million gallons of ethanol would ensure market support for ethanol production over the baseline limit. To further support ethanol, an effort should be made to make the fuel available for state and federal fleets and at the curb. Having the fuel available and being used will create the consumer confidence and familiarity necessary for acceptance. We should look to Eastern states like North Carolina, where 24 curbside ethanol pumps are available to consumers. Like Pennsylvania, they have very little ethanol production in the state but have created demand simply through making the product available. We should look to this and other examples to create similar markets here.

Having discussed the benefits of corn-based production of ethanol, I would also like to say that our real challenge is to move technology from corn-based production to cellulose-based production of ethanol using conversion technologies to change plant cells to sugars and the sugars to ethanol. This technology would allow us to conduct a sustainable harvest of excess plant residues from crops or secondary forestry production to produce ethanol from existing crops, as well as specific alternative energy crops like switchgrass.

By diversifying feedstocks, we can make ethanol a part of Pennsylvania's renewable energy program by promoting locally produced energy sources to provide heat and power from indigenous and homegrown resources that become the energy that gives something back to the community. Local resource development and use will create development in rural areas that collectively will help revitalize our local populations and reduce our dependence on foreign energy sources.

Thank you for the opportunity to provide this perspective from the Pennsylvania Department of Agriculture.