

1 COMMONWEALTH OF PENNSYLVANIA  
2 SENATE OF PENNSYLVANIA  
3 ENVIRONMENTAL RESOURCES AND ENERGY COMMITTEE

4 PUBLIC HEARING ON  
5 PROPOSED ALTERNATIVE FUEL MANDATE

6 Before: SENATOR MARY JO WHITE, CHAIR  
7 SENATOR RAPHAEL J. MUSTO, MINORITY CHAIR  
8 SENATOR MICHAEL W. BRUBAKER  
9 SENATOR EDWIN B. ERICKSON  
10 SENATOR ANDREW E. DINNIMAN  
11 SENATOR DON WHITE

12 Date : September 19, 2007; 9:00 a.m.

13 Place : North Office Building  
14 Hearing Room #1  
15 Harrisburg, Pennsylvania

16 By : Susan D. Kashmere, RPR  
17 Reporter - Notary Public

18 SPEAKERS:

19 PENNSYLVANIA DEPARTMENT OF AGRICULTURE  
20 DENNIS C. WOLFF, SECRETARY

21 PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
22 KATHLEEN A. McGINTY, SECRETARY

23 PENNSYLVANIA BIODISEL PRODUCERS GROUP  
24 BEN WOOTTON, PRESIDENT  
25 KEYSTONE BIOFUELS

CHESAPEAKE BAY FOUNDATION  
MATTHEW EHRHART, PA EXECUTIVE DIRECTOR

PENNSYLVANIA FARM BUREAU  
JOEL ROTZ, DIRECTOR OF STATE GOVERNMENTAL  
RELATIONS

PENNEENVIRONMENT  
NATHAN WILLCOX, ENERGY & CLEAN AIR ADVOCATE

1	I N D E X	
2	SPEAKERS	
3		PAGE
4	PENNSYLVANIA DEPARTMENT OF AGRICULTURE	
5	By: DENNIS C. WOLFF, SECRETARY	4
6	PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL	
7	RESOURCES	
8	By: KATHLEEN A. MCGINTY, SECRETARY	8
9	PENNSYLVANIA BIODIESEL PRODUCERS GROUP	
10	By: BEN WOOTTON, PRESIDENT KEYSTONE BIOFUELS	32
11	RACE MINER, CEO	39
12	CHESAPEAKE BAY FOUNDATION	
13	By: MATTHEW EHRHART, PA EXECUTIVE DIRECTOR	59
14	PENNSYLVANIA FARM BUREAU	
15	By: JOEL ROTZ, DIRECTOR OF STATE GOVERNMENTAL	74
16	RELATIONS	
17	PENNENVIRONMENT	
18	By: NATHAN WILLCOX, ENERGY & CLEAN AIR	88
19	ADVOCATE	
20		
21		
22		
23		
24		
25		

1           SENATOR WHITE: Good morning. I will call  
2 this hearing to order. This is a hearing of  
3 the Senate Environmental Resources and Energy  
4 Committee called specifically to review some of  
5 the fuels issues that will be coming before us  
6 on the Special Session on Energy, which, as I'm  
7 sure you all know, we are currently embarking  
8 on.

9           This is an important subject. We had  
10 hearings on the electricity side of it before  
11 we adjourned for the summer recess and we are  
12 now looking at some of the fuels proposals.

13           These are important initiatives and I  
14 appreciate the willingness of -- this is the  
15 first of two hearings that we'll have on this  
16 subject. Senator Musto, did you have comments?

17           SENATOR MUSTO: I have none.

18           SENATOR WHITE: We will then call the  
19 first testifier.

20           MR. HENDERSON: The first witness is  
21 Dennis C. Wolff, Secretary of Agriculture and  
22 Kathleen A. McGinty, Secretary of Environmental  
23 Protection.

24           SENATOR WHITE: Good morning. You can  
25 proceed in whichever order you like.

1           SECRETARY WOLFF: Thank you. I will begin  
2 this morning. We presented written testimony  
3 and I'm not going to read that. I'm just going  
4 to make some remarks as it relates to renewable  
5 energy in Pennsylvania.

6           First, I would like to say that it's  
7 certainly a pleasure for Secretary McGinty and  
8 myself to be here to talk about one of our  
9 favorite subjects, as well as Governor  
10 Rendell's favorite subjects, and that's  
11 renewable energy.

12           This is about improving our energy  
13 independence by using homegrown biofuels.  
14 This is about strengthening our homeland  
15 security. It's about a way to create new  
16 economic opportunities for Pennsylvania by  
17 using homegrown biofuels.

18           Last February Governor Rendell unveiled  
19 his energy independent strategy and that  
20 strategy is to save Pennsylvania consumers \$10  
21 billion over the next ten years. Those dollars  
22 would be used to increase investments in the  
23 state's renewable energy production, as well as  
24 create as many as 13,000 new jobs.

25           A major component of the energy

1 independent strategy is the PennSecurity Fuels  
2 Initiative. This initiative supports  
3 construction and expansion of new facilities  
4 that will produce one billion gallons of  
5 homegrown renewable fuels.

6 The one billion gallon target will  
7 directly benefit our state's economy, as well  
8 as directly benefit our state's farmers, as  
9 well as create new jobs and make us more energy  
10 secure.

11 By 2017 production will match the oil  
12 imported from the Persian Gulf and keep about  
13 \$30 billion here in Pennsylvania.

14 PennSecurity has many triggers starting at  
15 the B2 level, which is two percent biodiesel  
16 that would be triggered by 30 million gallons  
17 of in-state production and go up to a B20  
18 component, or 20 percent biodiesel, when the  
19 state reaches 300 million gallons of  
20 production. Also, E10 would become part of the  
21 mandate once in-state production reaches 200  
22 million gallons.

23 PennSecurity will lower independence on  
24 foreign oil and have us less dependent on  
25 countries that have unstable governments. It

1 will lower our vulnerability to severe weather  
2 events, like Katrina and Rita in 2005.

3 It will improve the income of our farmers  
4 and make us more food secure by keeping our  
5 farmers farming and it will help release some  
6 of the pressure of the global oil supply, as  
7 well as our global refining capacity.

8 I want to talk a little bit about the food  
9 versus fuel concern. First, I would like to  
10 say that corn prices in Pennsylvania last year  
11 at this time were around \$2.00 per bushel.  
12 Corn prices in Pennsylvania this year are \$4.00  
13 per bushel. And when you look at  
14 Pennsylvania's corn production and the increase  
15 in prices and you look at Pennsylvania in terms  
16 of being an ethanol state, we do not produce  
17 any ethanol here. The corn price is a national  
18 and a global price and Pennsylvania's corn  
19 prices are directly correlated to those two  
20 markets.

21 Our farmers are continually improving  
22 production every year and each year they  
23 produce more corn per acre. In fact, they  
24 traditionally produce about two bushels per  
25 acre more each year just through improved

1           technology and improved seed varieties.

2           Also, crops are being developed each year  
3           that produce higher volumes of renewable fuel,  
4           such as soybeans that produce more oil and corn  
5           that produces more ethanol.

6           In fact, corn started out in producing  
7           around two gallons of ethanol per bushel and  
8           it's now approaching three gallons of ethanol  
9           per bushel.

10          Livestock producers are adjusting.  
11          Rations are being adjusted to include the  
12          by-product of corn ethanol and that is dried  
13          distillers grains.

14          When corn is used to produce ethanol it  
15          doesn't disappear. In fact, the by-product is  
16          dried distillers grains and it actually has  
17          about 80 percent of the feed value that it has  
18          going into the process.

19          So much like soybean meal when producing  
20          biodiesel, the by-product from producing corn  
21          ethanol is dried distillers grain. It's  
22          important to our livestock industry.

23          Also, we're looking forward to when new  
24          technology allows us to transition to  
25          cellulosic ethanol. We know when that happens

1 Pennsylvania will be in an excellent position.

2 We have a very large hardwood industry,  
3 forestry industry in Pennsylvania and those  
4 waste materials now left in the woods can be  
5 used to produce cellulosic ethanol, as well as  
6 many of the marginal -- much of the marginal  
7 agriculture grown in Pennsylvania can be  
8 converted to grow crops that will be able to be  
9 used to produce cellulosic ethanol.

10 So we're asking you to enact this energy  
11 policy and we're excited about it. We think it  
12 has a lot of potential for Pennsylvania. It  
13 should enhance the security, our state's  
14 economy and our environment. And we think  
15 PennSecurity is good for all of Pennsylvania  
16 and particularly good for Pennsylvania  
17 agriculture.

18 So with that, Secretary McGinty and I  
19 would be glad to answer questions.

20 SECRETARY MCGINTY: I'd just add one thing  
21 -- two things briefly. One is we identified a  
22 series of issues that are raised with respect  
23 to biofuels in our testimony. We'll hold those  
24 for questions. We'd be happy to address them  
25 with you, the environmental impact, the net

1 energy balance, the infrastructure questions,  
2 for example.

3 The only thought I would like to add to  
4 and conclude our opening testimony is the sense  
5 of urgency about this. In visiting with some  
6 of you individually we've talked about what the  
7 global supply situation looks like with respect  
8 to transportation fuel and liquid fuel  
9 reserves.

10 Three weeks or so ago we had the country  
11 of Mexico, which is our second leading supplier  
12 of oil, making a rather stunning announcement,  
13 that in seven years they would be out of oil  
14 for export.

15 Now, if we think about cellulosic, if we  
16 started today we'd probably have our first crop  
17 of switchgrass ready in seven years. TOTAL is  
18 the seventh largest producer of oil in the  
19 world. They've just had to substantially  
20 reduce their commercially available reserves  
21 for production, as well as BP and Shell.

22 On top of that you have an unprecedented  
23 investment by oil companies in exploration and  
24 development. So at the time when the Baker  
25 Index, which tracks how many rigs are deployed

1 in exploration and development has reached an  
2 all time high you have a reserve replacement  
3 ratio of three to one. In other words, the  
4 globe is consuming three barrels of oil for  
5 every one that we're finding.

6 Obviously, last and on top of all of that  
7 we had a new record high in the price of oil  
8 yesterday with oil hitting \$82 a barrel.  
9 That's the sense of urgency that the Governor  
10 also brings to the issue in terms of our need  
11 and our opportunity and ability to become more  
12 energy secure through an initiative like the  
13 one that you're considering today. So we're  
14 especially grateful for your time and attention  
15 on this subject. Thank you.

16 SENATOR WHITE: Senator.

17 SENATOR BRUBAKER: Madam Chairman, thank  
18 you very much for holding this hearing. I  
19 really do appreciate it. It's timely. I'm  
20 certainly a big supporter of moving forward.  
21 The only challenge is how do we go about doing  
22 that. That's what I hope we can do with this  
23 hearing and future hearings. So thank you very  
24 much for hosting this hearing.

25 The number one question is this title that

1           some people are using is energy independence.  
2           And I want to make it clear to the people here  
3           today in the viewing audience that we're really  
4           not -- these strategies that we're talking  
5           about will not make Pennsylvania energy  
6           independent, in quotes, any time in the near  
7           future. Is that accurate or not accurate?

8                     SECRETARY MCGINTY: I share with you a  
9           thought. I think that that is the conventional  
10          wisdom in the sense that oil is a commodity,  
11          it's traded in global commodities markets and  
12          it's not the idea -- in fact, the legislation  
13          isn't premised on the idea that we are going to  
14          displace oil from the Middle East, it's just to  
15          establish that we can produce just as much  
16          here.

17                    But I share with you the insight that  
18          former CIA Director Jim Woolsey shared in  
19          joining the Governor to encourage attention to  
20          this issue. And he said that the issue here is  
21          that oil now is a strategic resource, which  
22          means that we do not just use it, we are  
23          governed by it and that the objective of energy  
24          independence is that we use it, but at our  
25          discretion with other options available to us.

1           SENATOR BRUBAKER: Well, thank you, but  
2           just to reiterate. We import a significant  
3           portion of our total oil and if we're  
4           successful short term, meaning the next five,  
5           10, 15 years, we're going to continue to -- our  
6           current projections, is this accurate, will be  
7           that we continue to import some portion of oil  
8           from outside of Pennsylvania, outside the  
9           United States?

10           SECRETARY MCGINTY: 12 and a half percent  
11           of our oil comes from the Persian Gulf and that  
12           is likely to continue.

13           SENATOR BRUBAKER: Thank you.

14           SENATOR WHITE: Senator Musto.

15           SENATOR MUSTO: Thank you, Madam Chairman.  
16           Madam Secretary, the Federal Energy Policy Act  
17           of 2005 requires a mandate to use alternative  
18           fuels. How does the Governor's proposal fit  
19           with the mandate from the federal government?

20           SECRETARY MCGINTY: Thank you. Yes, at  
21           the federal level we have two things. One is  
22           already in law with a seven and a half billion  
23           gallon requirement for biofuels by 2012. The  
24           President has increased that call for the use  
25           of biofuels to a goal of 35 billion gallons of

1           biofuels to be used by 2020.

2                     Some of the energy bills moving through  
3           the House and Senate in Washington are adopting  
4           that goal. So we could see a pretty dramatic  
5           increase in the national level in terms of the  
6           use or the call for the use of biofuels.

7                     Where our piece fits in is two ways.  
8           First, the President's call for the enhanced  
9           use of biofuels, back to the piece of the  
10          message we shared earlier in terms of the  
11          urgency of action here, is informed by his  
12          sense of the national security imperative that  
13          is at stake with diversifying our fuel  
14          resources, but the bottom line is that that  
15          objective and those global numbers cannot be  
16          met unless the 50 states stand up and say count  
17          us in, we will build the infrastructure, have  
18          the production, the distribution, the delivery  
19          means in place, Mr. President, to meet that  
20          objective.

21                    And the second is very much of wanting to  
22          put ourselves first. If the President's goal  
23          is to be realized, it means that billions of  
24          dollars will be mobilized to build this kind of  
25          capability in the biofuel sector and

1 Pennsylvania should be at the heart of that.

2 We should send an unmistakable signal to  
3 Wall Street and everywhere else that  
4 Pennsylvania is open for business in building  
5 and being a dominant leader in the manufacture  
6 and export of biofuels.

7 SENATOR MUSTO: Thank you.

8 SENATOR WHITE: Madam Secretary, you note  
9 that the Federal Renewable Fuels Standard is  
10 resulting in a significant increase in  
11 alternative fuels production in the United  
12 States, but why not model our legislation after  
13 the federal standard, which mandates the  
14 distribution of alternative fuel, but let the  
15 market dictate where to put it rather than  
16 require a fixed percentage in every gallon?

17 SECRETARY MCGINTY: Really, we actually,  
18 when the Governor first proposed the initiative  
19 in May of 2006, we took just that type of  
20 approach and we actually have a tradeable  
21 credit program that would enable, as you  
22 suggest, the market to decide which, what  
23 types, the particular volumes of which types of  
24 fuels to be used.

25 It actually was the business participants

1 in our stakeholder process that we had then  
2 since 2006 in shaping the details of the  
3 legislation who said that doesn't work for us,  
4 we would much prefer the clear market signal of  
5 knowing that every gallon of gasoline will have  
6 that ten percent ethanol and every gallon of  
7 biodiesel will have that two percent biofuels  
8 to begin with. If we're going to invest in the  
9 manufacturing, distribution capability to  
10 deliver this fuel, we want to know that the  
11 market will be there for it unambiguously.

12 And, last, there was a sense, well, from  
13 the retail level, that it is a much easier  
14 proposition not to have a variety of boutique  
15 fuels, but to have one consistent fuel formula  
16 that when you pull up to the pump that's what  
17 you're getting without any confusion. So  
18 that's where that change in direction came  
19 from.

20 SENATOR WHITE: Well, my concern, and this  
21 is ancient history, but in the past my  
22 understanding was that much of western  
23 Pennsylvania's fuel came from out-of-state  
24 suppliers.

25 Now, if our fuel is coming from Ohio and

1           they don't have an ethanol mandate, I fear  
2           market disruption.

3                   SECRETARY MCGINTY: Well, in fact, the  
4           western part of the state, the fuel most  
5           definitely does not come from Ohio, because  
6           there are not pipelines that move west to east.

7                   Pennsylvania is served by three major  
8           pipelines. They all originate in the eastern  
9           part of the state and transverse the state  
10          towards the west. And that's the Sunoco, the  
11          Valero and the Buckeye pipelines, but they all  
12          begin in the east and move to the west. The  
13          western part of the state is not served from  
14          west to east. The western part of the state,  
15          though, is served by United Refining in Warren,  
16          Pennsylvania, as well.

17                   SENATOR WHITE: The legislation as drafted  
18          requires a study on the impact on air quality.  
19          Is that correct?

20                   SECRETARY MCGINTY: It doesn't require --  
21          no, it doesn't do that, but we do share in our  
22          testimony some of the latest data from the EPA.  
23          Basically, it sizes up in the following manner.  
24          With biodiesel it is a very substantial air  
25          quality gain in almost every parameter of VOCs,

1 air toxics, greenhouse gases with one  
2 exception, which is with respect to NOx.

3 And with respect to NOx, it is mostly a  
4 positive story, although there is some question  
5 about a possible slight increase in NOx in  
6 highway diesel traffic and that has to do with  
7 the cycling of the engine and the engine  
8 temperature. Biodiesel, I think it's pretty  
9 much of a hands down, very substantial positive  
10 air quality picture.

11 With ethanol the situation is very  
12 positive in terms of air toxics, very positive  
13 in terms of greenhouse gas emissions. With  
14 respect to VOCs and NOx, there is some  
15 increase, but EPA has said that their analysis  
16 shows that that increase is not a sufficient  
17 magnitude to cause an ozone problem; they say  
18 an increase in ozone challenge by about 3.5  
19 percent, and part of the reason for that is  
20 that you have a decrease in carbon monoxide,  
21 which is an ozone precursor, even as you have a  
22 slight increase in VOCs and NOx.

23 So we do share that, but that is the  
24 latest EPA research on the question.

25 SENATOR WHITE: I guess my problem with

1           that is while the EPA studies may have shown  
2           only a marginable decline in air quality,  
3           doesn't a proper analysis really require that  
4           you look at specific regions of the  
5           Commonwealth and assess the impact, because  
6           they vary greatly, as you know?

7           SECRETARY MCGINTY: Well, in fact, if we  
8           did do that, one of the things that would put  
9           Pennsylvania in a better position even than the  
10          national picture that EPA takes is the  
11          five-county Philadelphia area has for a number  
12          of years now had E10, ten percent ethanol in  
13          every gallon of gasoline sold.

14          Now, fully 25 percent of all the gasoline  
15          consumed in Pennsylvania comes from a pump in  
16          the five-county Philadelphia area. So there  
17          wouldn't be any change in air quality now  
18          through this legislation for that substantial  
19          part of the Commonwealth.

20          SENATOR WHITE: Would passage of this  
21          legislation require any revision in our  
22          federally-mandated state implementation plan?

23          SECRETARY MCGINTY: No, it would not.

24          SENATOR WHITE: Any other questions?  
25          Senator Dinniman.

1           SENATOR DINNIMAN: What I'd like to say is  
2           that I think the initiatives that we're trying  
3           to do in biodiesel are tremendously important,  
4           that not only will this help us become more  
5           energy independent, but even more importantly,  
6           the opportunity economically for us in terms of  
7           jobs, in terms of the new economy.

8           Secretary McGinty was recently in my  
9           county where I believe over 120 businessmen and  
10          women came together just to focus on the  
11          economic opportunity. And already in Chester  
12          County and Montgomery County I can see the  
13          entrepreneurship that's beginning to evolve.  
14          And I know, Secretary Wolff, that this also has  
15          great opportunities in terms of agriculture as  
16          well.

17          So I'm very happy that -- and the word  
18          isn't happy. I'm very satisfied that we're  
19          going in the right direction on this, satisfied  
20          that we have not only an opportunity in terms  
21          of cleaning up the environment, not only an  
22          opportunity in terms of energy independence,  
23          but, also, of creating jobs in the new economy  
24          for Pennsylvania. So I don't think there's any  
25          question at all in terms of the biodiesel part.

1           I do thank our Chairman Senator White for  
2 bringing up the questions on ethanol because I  
3 think that requires a very thorough discussion  
4 to see if there's any -- to understand the  
5 negative impacts. And the fact that we already  
6 have data in from the five-county Philadelphia  
7 area should help us in that, but I do thank  
8 Senator White for at least having this  
9 committee and the Senate ask those questions,  
10 because the biodiesel part with the soy, you  
11 know, I think that question has been answered a  
12 long time ago. The ethanol part, we deserve to  
13 just look at it thoroughly. Thank you, Madam  
14 Chairman.

15           SENATOR WHITE: Senator Brubaker?

16           SENATOR BRUBAKER: Thank you very much.  
17 Just two very quick questions. Secretary  
18 McGinty, I believe the question on the air  
19 study is a bit at least vague to me.

20           Would you agree to submit a brief letter  
21 to us telling us in writing whether that air  
22 study is required or not? I thought I had read  
23 that an air study would be required. I think I  
24 heard in your testimony that an air study is  
25 not required.

1           SECRETARY MCGINTY: The Senator asked two  
2 things, whether this legislation mandates an  
3 air study, and I don't believe it does, but  
4 I'll read through the details of it again.

5           SENATOR BRUBAKER: Could you offer the  
6 committee a memo on that, please?

7           SECRETARY MCGINTY: Sure, I'd be very  
8 happy to.

9           SENATOR BRUBAKER: And then the second  
10 question to Secretary Wolff. You stated that  
11 corn price went from \$2.00 a bushel to \$4.00 a  
12 bushel. I think you made a great point in the  
13 fact that it did that in Pennsylvania without  
14 Pennsylvania having a sitting ethanol facility.

15           Are you able to speculate -- the United  
16 States is full board ahead. I think we have  
17 140 or so ethanol plants nationwide. 70 are  
18 looking to go on line relatively short-term.

19           Do you have any forecast of what that  
20 potentially could do roughly short term, in the  
21 next three to five years on U.S. corn prices?

22           MR. WOLFF: That's a good point. In  
23 looking at the national projections, they look  
24 at corn as coming back down, and in probably  
25 the next five years the average price being

1 more than \$3.50 per bushel range and then  
2 looking on out, even five to ten years from  
3 now, a decrease beyond that.

4 It's interesting when you look at the way  
5 the United States corn supply is used. The two  
6 areas -- the one area that would be impacted  
7 certainly the most would be our exports,  
8 because we still export around two billion  
9 bushels per year of the 13 billion bushels that  
10 the United States produces. So much of the  
11 corn that would be going into the ethanol  
12 channel would be reducing our exports.

13 The other very large component of the corn  
14 produced in the United States is used for  
15 livestock feed and that actually represents  
16 about 55 percent on average. They say, looking  
17 forward, that that will probably decrease to  
18 about 45 percent of the total U.S. corn  
19 production going into livestock feed with the  
20 transition going to dried distillers grains, as  
21 they develop new methods of processing that and  
22 further processing that so a higher volume can  
23 be used to replace corn as a feed stock for  
24 feeding livestock.

25 SENATOR BRUBAKER: Thank you.

1           SENATOR WHITE: Do you know, Mr.  
2 Secretary, is ethanol storage more flammable or  
3 susceptible to explosion than other fuels?

4           MR. WOLFF: Secretary McGinty, I'm not  
5 sure.

6           SECRETARY MCGINTY: I would have to  
7 respond for the record, I don't believe so. It  
8 is, obviously, a flammable material, but  
9 whether it's more flammable than conventional  
10 gasoline, I feel better checking on that and  
11 responding for the record.

12          SENATOR WHITE: Because I know there are  
13 problems with its distribution as well because  
14 of its propensity to track water.

15          SECRETARY MCGINTY: Yes.

16          SENATOR WHITE: So it can't go through a  
17 pipeline. So it has to be shipped by other  
18 means?

19          SECRETARY MCGINTY: Well, it could go  
20 through a pipeline, but you would need to make  
21 sure that the water had been removed from the  
22 pipe. For example, in Brazil they do move  
23 ethanol through pipes, but the pipes have been  
24 lined with a resin to make sure that there is  
25 not water in the pipeline. So you would have

1 to take extra care.

2 I think, for all practical purposes, it's  
3 safe to assume that most of that ethanol will  
4 be moved through truck and through rail and/or  
5 barge.

6 SENATOR WHITE: Do we know then --  
7 obviously, we're going to need an  
8 infrastructure to distribute this material. Do  
9 we know what the impact is going to be on the  
10 price at the pump of fuel?

11 SECRETARY MCGINTY: Well, I can tell you  
12 what we are seeing so far. First of all, while  
13 there most certainly will be a need for  
14 additional infrastructure to handle ethanol,  
15 Pennsylvania finds itself relatively well  
16 placed.

17 We have more rail miles than any state but  
18 four and we have one of the most extensive road  
19 networks, as you know, in the country, as well  
20 as our deep ports in Pittsburgh, Philadelphia  
21 and Erie. So we are already well ahead of the  
22 curve in terms of the infrastructure being in  
23 place.

24 Since May of 2006 when the Governor first  
25 launched this initiative, there also has been

1 an appreciable additional investment in  
2 infrastructure.

3 The Philadelphia area already has the  
4 infrastructure in place and the real question  
5 was what about central and western  
6 Pennsylvania.

7 Central Pennsylvania, Farmers Home and Oil  
8 and the PPC Corporation have already made the  
9 investments to build out the unit-train-capable  
10 distribution infrastructure that would be  
11 necessary and PPC is doing the same in Neville  
12 Island in Pittsburgh.

13 So I think that we are within a year or  
14 two years of having that sufficient  
15 infrastructure, at least I can certainly share  
16 with you that investment is being made in  
17 anticipation of action like you have before you  
18 by the legislature.

19 SENATOR WHITE: But we haven't done any  
20 economic impact statement as to what this would  
21 add to the actual price of gasoline at the  
22 pump?

23 SECRETARY MCGINTY: I suppose we would  
24 have to unpack that, but ethanol to date has  
25 been trading either at or below the price of

1 conventional fuel or, to be more accurate, in  
2 August ethanol was trading at about two, three  
3 cents cheaper than conventional fuel.

4 At no time since February of 2007 has  
5 there been any more than about a nickel  
6 difference in the price of ethanol or  
7 conventional fuel.

8 With respect to biodiesel we've actually  
9 been in a consistent pattern of B20 trading  
10 appreciably cheaper than conventional diesel.

11 SENATOR WHITE: I asked this question -- I  
12 mean, obviously, we're talking about the prices  
13 being comparable with a significant federal  
14 subsidy included, correct?

15 SECRETARY MCGINTY: That is true, although  
16 probably a subsidy that is a fraction of the  
17 subsidies that support the oil industry more  
18 broadly. We shared some data that are on that  
19 particular point where the U.S. Congress has  
20 examined that question.

21 So, yes, there are grants and tax credits  
22 available for ethanol and now also for  
23 biodiesel, but they are not of the magnitude of  
24 the subsidies that support the price of oil.

25 In fact, the data we showed you was the

1 National Defense Center Foundation did an  
2 analysis -- these were 2006 numbers -- that  
3 indicated that if all of the public subsidies  
4 that support the oil industry were taken away  
5 and you paid the whole price at the pump, it  
6 would cost you about \$312 to fill up your  
7 larger scale vehicle and \$217 to fill up a  
8 sedan. So there are plenty of subsidies across  
9 the board.

10 SENATOR WHITE: Well, I guess my question  
11 is if in looking at how to stimulate  
12 alternative fuels, why was the decision made to  
13 do both a state subsidy and a state mandate,  
14 why not simply give it an additional state  
15 subsidy to encourage its production and let the  
16 marketplace decide how it's going to be sold?

17 SECRETARY MCGINTY: Well, our thinking is  
18 the following. First of all, in terms of from  
19 a global perspective, the United States has  
20 been very fickle over the years and over the  
21 generations and temperamental as to whether or  
22 not we care about energy, we don't care about  
23 energy. We get ourselves all revved up, we're  
24 going to improve our energy security and we  
25 find ourselves much further behind the ball.

1           So we now import 66 percent of all the fuel we  
2           use. In the first oil embargo we only imported  
3           23 percent.

4           So part of this is to say we're going to  
5           stick and stay this time. The stakes are too  
6           high to be fickle and temperamental. We're  
7           going to write it into law, this is where we're  
8           going.

9           The second, though, is part of what again  
10          came out of some of our stakeholder process  
11          where you've got hundreds of millions, if not  
12          billions of dollars of investment that are  
13          going to be made. People also want to know  
14          this is not going to be something that is  
15          attractive today and tomorrow is not attractive  
16          and they've got all of that stranded investment  
17          hanging out there.

18          And finally was the piece that Senator  
19          Musto hinted at, which is there's a lot of  
20          competition out there. There are a lot of  
21          states that would like to have a piece of the  
22          change, if you will, in terms of the massive  
23          investments that are going to be made. And  
24          Wall Street doesn't have a lot of time.  
25          They'll look where there are the least risks,

1           where there's the least uncertainty in terms of  
2           their investment being a good investment and  
3           mandates are part of that picture.

4           SENATOR WHITE: Patrick just handed me a  
5           copy of House Bill 1202, which is the  
6           administration's proposal. And the very last  
7           page of it there is a section that says the  
8           Department shall conduct a study to evaluate  
9           the effects this act has on the ability of this  
10          Commonwealth to attain and maintain the  
11          National Ambient Air Quality Standards.

12          SECRETARY MCGINTY: Okay, great.

13          SENATOR WHITE: I guess from your  
14          testimony I'm getting the impression that the  
15          Department has already decided that there  
16          aren't any adverse impacts, but wouldn't it be  
17          better, given that, to perhaps have an  
18          independently conducted study rather than --

19          SECRETARY MCGINTY: Well, first of all,  
20          that wasn't my testimony. I think I went  
21          through pollutant by pollutant in terms of  
22          which go down and which go up. And I can go  
23          over that again, if you'd like. No, it's not  
24          that there's no impact.

25          Second, that's not our data. That's U.S.

1 EPA data, but I just happen to have forgotten  
2 that one sentence in this piece of legislation  
3 and, we're, obviously very happy to do that  
4 study and to have others to contribute data to  
5 such a study.

6 SENATOR WHITE: Well, do you anticipate  
7 that study being an actual air measurement, air  
8 quality measurement or what do you see that  
9 study as encompassing?

10 SECRETARY MCGINTY: My guess is that part  
11 of it would be ambient air monitoring since we  
12 now do have a track record of data. We've got  
13 a number of years of use, at least on the  
14 ethanol side, as I mentioned, in the  
15 five-county Philadelphia area, but some of that  
16 would have to be a modeling exercise.

17 SENATOR WHITE: I guess I'm wondering, if  
18 we do the study and we find out that there are  
19 negative impacts when we do, do we unravel  
20 this?

21 SECRETARY MCGINTY: I would think that  
22 that would be a very unwise course, because  
23 whether it is some air quality challenge or  
24 whether it is a challenge with needing to  
25 invest in additional infrastructure, my own

1           personal view, the Governor's view is that it  
2           is imperative for us to move in this direction  
3           and do our part to help meet the President's  
4           challenge and to help ensure the security of  
5           the country.

6                     And I think it's also imperative because  
7           it is true to our history. You know, we are  
8           the place of the world's first  
9           commercially-producing oil well and the next  
10          generation of energy and fuels should be ours  
11          to lead and that history to write as well, is  
12          how he feels about it.

13                    And there are issues in this hearing, it  
14          is helpful in identifying them, but if we  
15          found, obviously, that there was some disaster  
16          that had not been anticipated, then, obviously,  
17          you need to take that very seriously, but from  
18          what we know now, not anticipating a challenge  
19          of that magnitude, it would identify the issues  
20          that need to be dealt with.

21                    SENATOR WHITE: Thank you. Any other  
22          questions? Thank you.

23                    SECRETARY MCGINTY: Thank you very much.

24                    MR. HENDERSON: Our next witness is Ben  
25          Wootton, President of Keystone Biodiesel Fuels,

1 Pennsylvania Biodiesel Producers Group.

2 MR. WOOTTON: Good morning and thank you  
3 for allowing us the opportunity to appear  
4 before you today. My name is Ben Wootton. I'm  
5 President of Keystone Biofuels.

6 Our firm is headquartered in  
7 Shiremanstown, Cumberland County. 18 months  
8 ago we were the first company in Pennsylvania  
9 to begin a full-scale production of biodiesel  
10 fuel made from Pennsylvania soybeans and today  
11 we remain at the forefront as an innovative  
12 producer of renewable fuel in the Keystone  
13 state. In fact, our plant is located in part  
14 of the former Quaker Oats manufacturing  
15 facility. We are re-using that site, creating  
16 new jobs and contributing to the economy while  
17 we produce new energy solutions for  
18 Pennsylvania.

19 We are part of a collection of six  
20 biodiesel companies who have come together to  
21 form the Pennsylvania Biodiesel Producers  
22 Group. Our companies are strategically located  
23 across the Commonwealth.

24 Collectively, we have the capacity to  
25 produce 15 million gallons of biodiesel fuel

1 per year with the plants and the facilities we  
2 have already invested in and those presently in  
3 place.

4 Energy policy is such a wide-ranging topic  
5 today that it's hard to get our arms around the  
6 various issues. Some technologies, such as  
7 clean coal, solve part of the problem by  
8 encouraging energy independence, but don't  
9 solve other parts of the problem since they are  
10 not renewable or environmentally ideal. Such  
11 is the nature of energy as an issue. We always  
12 seem to be facing trade-offs between energy  
13 independence, environmental benefits and  
14 economic viability.

15 Biodiesel overcomes the tension between  
16 these trade-offs. Not only is biodiesel  
17 renewable and environmentally friendly, but it  
18 is also derived primarily from Pennsylvania  
19 soybeans or animals fats, so it supports the  
20 farming and livestock industry and it is  
21 available today.

22 Right now we can take our product, put it  
23 into the fuel tank of a fire truck, transit  
24 bus, farm machinery, construction equipment,  
25 school bus or tractor trailer truck and it will

1 run smoothly and greatly decrease petroleum  
2 pollution that goes into our air.

3 Earlier I mentioned that all of the group  
4 members can produce 15 million gallons of  
5 biodiesel fuel per year using their current  
6 production facilities, but we're not producing  
7 15 million gallons or anywhere close to that.

8 In fact, you heard testimony today that  
9 some producers have halted production entirely.  
10 And without your help most of the producers in  
11 the Commonwealth, including Keystone Biofuels,  
12 will be forced to shut down production as well.  
13 With your help we can prevent this ultimate  
14 end, but only with your help, and we need this  
15 help now before it is too late.

16 So if biodiesel is so beneficial in so  
17 many ways, why are we struggling to produce it  
18 in Pennsylvania? In short, for two reasons.  
19 One, grain prices are fluctuating wildly due to  
20 nationwide speculation on ethanol and biodiesel  
21 fuel demand, and, two, we are competing with  
22 biodiesel producers from 24 other states in the  
23 U.S. who are receiving a wide variety of  
24 incentives, including production incentives, to  
25 make their fuel cost competitive.

1           How is this possible since Pennsylvania is  
2           in the midst of a major investment in  
3           alternative energy? Simple. We are moving  
4           forward on mandates without planning for  
5           producers. In other words, we're legislating  
6           that people will have to use millions of  
7           gallons of biodiesel fuel in the future, but we  
8           are not addressing where that fuel will come  
9           from.

10           This is where we need your help. We need  
11           a biodiesel production incentive included in  
12           the mandate to protect Pennsylvania-produced  
13           biodiesel from disappearing all together.

14           There are regulations that protect  
15           different aspects of Pennsylvania's economy,  
16           but Pennsylvania biodiesel producers are not  
17           protected and have been suffering because of  
18           it. And that is why we are here seeking your  
19           ironclad commitment to filling the gap in our  
20           present state energy policy so that 30 million  
21           gallons of biodiesel we want to see being  
22           consumed in Pennsylvania is coming first and  
23           foremost from economically competitive,  
24           locally-owned Pennsylvania biodiesel firms who  
25           are using Pennsylvania soybeans, Pennsylvania

1 feedstock mills and Pennsylvania crushing  
2 facilities in the process of meeting this  
3 mandate.

4 Our ask is simple. We seek a one dollar  
5 per gallon production incentive, which would  
6 effectively match the current federal incentive  
7 exactly. This would not be an untested  
8 experiment. 24 states have already passed a  
9 biodiesel production incentive policy.

10 Based upon economic impact results we've  
11 studied, it's clear that each dollar of this  
12 investment will derive 8 to \$10 of in-state  
13 production impact.

14 Furthermore, we are seeking this incentive  
15 for just three years. This is long enough for  
16 our in-state industry to mature, the grain  
17 markets to stabilize and the demand to  
18 aggregate as we reach toward our mandate  
19 triggers.

20 Without it, Pennsylvania will continue to  
21 face a flood of out-of-state trucks entering  
22 the Commonwealth to distribute biodiesel  
23 product made outside of Pennsylvania and from  
24 crop farms and other suppliers based in other  
25 states as well.

1           Meanwhile, our in-state biodiesel industry  
2           will literally collapse within the coming  
3           months. Again, we need this help now before it  
4           is too late.

5           Pennsylvania should lead the way on  
6           renewable fuel biodiesel production, not be  
7           hurt in the wake of other states' achievements.  
8           We Pennsylvanians are proud of being part of a  
9           state that can take care of its own needs.

10          We have forests, farms and coal mines. We  
11          produce steel and software, educate our own  
12          students and provide strong job opportunities  
13          for our young people. Now is a critical time  
14          for us to get our energy policy right and to  
15          make the same commitment to Pennsylvania first  
16          with biodiesel. Reduce air pollution, create  
17          new jobs and save the biodiesel industry with a  
18          biodiesel production incentive and mandate.

19          I will be happy to answer any questions  
20          you may have. I am also accompanied by a  
21          number of colleagues who are also available to  
22          address questions and points of consideration.  
23          Again, thank you for your time. We look  
24          forward to working with you to collaborate on  
25          planning together for the future of

1 Pennsylvania biodiesel.

2 SENATOR WHITE: Thank you. Senator Musto  
3 was called away on another committee meeting  
4 and Senator Dinniman. Senator Erickson.

5 SENATOR ERICKSON: Thank you, Senator  
6 White. Good morning. Earlier in your  
7 testimony you mentioned the Pennsylvania  
8 soybeans or animal fats and then you seemed to  
9 focus just on soybeans later.

10 Are you also advocating that we have a  
11 subsidy for the animal fats process as well as  
12 a soybeans process?

13 MR. WOOTTON: No, we're advocating for a  
14 production incentive producer; the definition  
15 of biodiesel using the ASTM D6751 terminology,  
16 which is feedstock neutral.

17 Pennsylvania is a big producer of  
18 soybeans. We export more than half of the  
19 beans out of state. We're also a big producer  
20 of light grease, which is the animal fat,  
21 chicken fat. We're a big producer of the other  
22 grease, which is the restaurant grease.  
23 All the facilities and the plants that are in  
24 PA use all of those resources to make  
25 biodiesel.

1           SENATOR WHITE: Senator Brubaker.

2           SENATOR BRUBAKER: Thank you, Senator  
3           White. Can you explain in relative terms  
4           without divulging any integral property rights  
5           your cost of production, Pennsylvania's cost of  
6           production versus the cost of production of  
7           other states?

8           MR. WOOTTON: I'd be happy to share  
9           Keystone Biofuels' numbers, which I've done  
10          many times with the administration and the  
11          legislature as well on our cost.

12          Right now for our company to break even,  
13          our price right now on the Opus board is \$4.59.  
14          The current price of biodiesel right now being  
15          sold in Pennsylvania is around 3.27, \$3.27. So  
16          apparently we're about a dollar 12 spread to be  
17          competitive on that level.

18          SENATOR BRUBAKER: Is that testimony  
19          contradictory to the testimony of Secretary  
20          McGinty when she said B20 across the nation is  
21          selling cheaper than conventional diesel fuel?

22          MR. MINER: I'm Race Miner, CEO of  
23          Keystone Biofuels. It's not contradictory to  
24          her testimony. I think, in actuality, it  
25          supports it or it supports our notion that

1            Pennsylvania biodiesel producers are at a  
2            disadvantage because it's more heavily  
3            subsidized, biodiesel from other states,  
4            subsidized by other states' programs, is able  
5            to penetrate our marketplace at a cheaper price  
6            than we can do it right now.

7                       So we have seen that what's actually going  
8            into the marketplace is not necessarily our  
9            biodiesel. As a matter of fact, I think six to  
10           eight million gallons of biodiesel actually  
11           penetrated Pennsylvania's market last year, but  
12           of that, 600, 700,000 gallons of it was  
13           actually produced in the State of Pennsylvania.

14                      SENATOR BRUBAKER: So it's costing you,  
15           internal cost \$4.95 a gallon. And product  
16           coming in is coming in at what level?

17                      MR. WOOTTON: Actually, that was \$4.59.  
18           And the market price right now of Pennsylvania  
19           biodiesel being sold is \$3.27 as of yesterday.

20                      SENATOR BRUBAKER: You're asking for a  
21           dollar a gallon subsidy, correct?

22                      MR. WOOTTON: Yes.

23                      SENATOR BRUBAKER: If the Commonwealth of  
24           Pennsylvania goes in that direction, what's to  
25           prevent the other 23, 24 states from taking

1           their one dollar and going to two and do we end  
2           up with another race to who knows where?

3           MR. WOOTTON:  What states are realizing is  
4           the investment that biodiesel brings.  With  
5           biodiesel, the mandate says 30 million gallons  
6           and roughly it costs the state \$5 a gallon.  
7           You're talking \$150 million of commerce  
8           generated off biodiesel annually off that  
9           30-million gallon mandate.

10           The farming community is going to plant  
11           more beans, create more jobs and there's \$10  
12           million annual increase from that.

13           I'll use Pennsylvania as an example.  As I  
14           said, more than half the beans go out of state.  
15           The question in the industry right now is a  
16           question about the (inaudible).  They can  
17           actually triple their size of crushing.  So  
18           you're talking hundreds of millions of dollars  
19           and hundreds of jobs on that industry.  Then  
20           you have biodiesel and then you have  
21           distribution on top of that.  So states are  
22           seeing the success of the federal policy.

23           SENATOR BRUBAKER:  I really appreciate  
24           that detail.  I think I have a grasp of that.  
25           Is there anything in state or U.S. law that

1 would prevent the other states from increasing  
2 the subsidies so, therefore, they can better  
3 compete against Pennsylvania should  
4 Pennsylvania subsidize that one dollar a  
5 gallon? Do you understand?

6 MR. MINER: I understand the question. I  
7 can speak directly to that. What has happened  
8 with these other states that created these  
9 subsidies is that biodiesel production  
10 facilities in those states has exploded.

11 SENATOR BRUBAKER: I just want to make  
12 sure I understand the answer to the question is  
13 we don't know?

14 MR. MINER: We don't know.

15 SENATOR BRUBAKER: Or that there's nothing  
16 in place that would prevent other states from  
17 increasing their subsidy. Is that accurate?

18 MR. MINER: I don't know. I don't know if  
19 there is something in place to do that, but  
20 what I was going to try to draw out for you is  
21 that explosion in production capacity has  
22 resulted in excess capacity of product that can  
23 flood our market.

24 We think very strongly as their mandates  
25 start to kick, that that big pipeline that is

1 available for biodiesel is going to start to  
2 trickle down to a hose. Also, their subsidy is  
3 not so that they can compete in other  
4 marketplaces, it was to grow their biodiesel  
5 business. And as we grow our biodiesel  
6 business with this proposed subsidy we don't  
7 think we're going to get into a subsidy war  
8 with them, they're going to go to another  
9 market. That's how we feel.

10 SENATOR BRUBAKER: You're asking for a  
11 three-year, a \$1-a-gallon subsidy and you're  
12 saying three years and stop. Are each of the  
13 four of you willing to commit to this point in  
14 time that again if that \$1 per gallon were to  
15 be offered, were to be given, what level of  
16 assurance do we have that two and a half years  
17 from now we don't -- you don't change your  
18 perspective and ask for another three-year  
19 extension?

20 MR. WOOTTON: Well, in life there's no  
21 guarantees on any outcomes, the death and taxes  
22 comment. All I can share with you is  
23 information that educates you on what's  
24 happening in the industry.

25 On the poster, at the bottom of that

1 picture is a picture of the United States.  
2 Everything in gray is states that have in-state  
3 incentives. If I were to overlap where all the  
4 production is being built right now, it would  
5 cluster in that area of those gray states.

6 Also, there are seven states right now  
7 that have mandates, eight other states that  
8 will have mandates by the end of the year, a  
9 total of 15 states that will have mandates.

10 And if we get a dollar tax credit we can  
11 ramp up production, because right now we can't  
12 compete, there's not a level playing field in  
13 other states.

14 Those mandates that we're trying to  
15 produce here are being already produced in  
16 other states on the same levels. It starts at  
17 two percent, five percent and ten percent. So  
18 as they start becoming mandated, they'll  
19 trigger their higher points and they'll absorb  
20 the excess capacity that are leaving the states  
21 right now.

22 You'll also notice, one last point I can  
23 make, that Pennsylvania is being circled by the  
24 wagon, so to speak, when it comes to that  
25 effect and it's critical that we act and invest

1 in this opportunity.

2 SENATOR BRUBAKER: I think your testimony  
3 has been outstanding. Thank you very much.

4 SENATOR WHITE: That's a pretty hefty  
5 subsidy when you get a dollar a gallon from the  
6 state and a dollar a gallon from the feds and  
7 it comes to about \$84 a barrel, which is pretty  
8 pricy, but when you consider that's all  
9 subsidy, isn't it?

10 MR. WOOTTON: \$84 a barrel for the price  
11 of oil? Well, I would make the comment that if  
12 we think we're paying \$3.00 a gallon for  
13 gasoline at the pump, we're all misled, because  
14 the subsidies are attached on the petroleum  
15 side. So I've read reports that the true price  
16 of a barrel is \$650 a barrel if you take out  
17 all the subsidies involved.

18 So I think a dollar per gallon, according  
19 to the National Biodiesel Board, they did a  
20 study that when the national level gets to 650  
21 million gallons, right now we're at 350 million  
22 gallons, that took four years for the industry  
23 to get there. So say it takes another four  
24 years to reach 650 million, which is what they  
25 did a study on, they're saying that that's

1 going to add \$24 billion of economy a year, to  
2 our economy and create 39,100 permanent jobs.

3 And that's why states that you see on that  
4 map are investing in this, because it's the  
5 right thing to do from an economy standpoint.  
6 If your concern is energy independence or  
7 global warming, clean air, biodiesel is  
8 something that they want to get behind.

9 Pennsylvania should do this because we do  
10 export our B stocks and that industry will  
11 solidify in the next three years. And those  
12 states that are trying to get back half of that  
13 share, it will leave like a concrete effect,  
14 you know, if they don't get a place to help  
15 produce biodiesel, then we'll have to import  
16 it. We're going to ship our beans, our white  
17 grease, animal grease, our products out,  
18 and be up to paying a higher price coming back  
19 in.

20 One more comment on that. There are also  
21 studies stating that for every dollar the  
22 federal government is paying for that subsidy  
23 has created \$2.37 of tax revenue back into the  
24 U.S. Treasury, not revenue, not commerce, but  
25 that's tax revenues back.

1           So, again, the states are seeing this.  
2           And not only does it produce commerce, but it's  
3           actually paying for itself.

4           SENATOR WHITE: Why do we need a subsidy  
5           and a mandate?

6           MR. WOOTTON: Very good question. I was  
7           kind of hoping you'd ask that. Originally the  
8           mandate was not a high priority on the list,  
9           but you have to understand, our industry has  
10          only been around for 18 months, for the most  
11          part. The last few years we all built our  
12          facilities here and so we're learning as we go.

13          And we knew when we got into this business  
14          we had to compete with petroleum. We've had  
15          one energy source and that was what we were  
16          focusing on.

17          What's happened and what's clear to us is  
18          across the country there's only 37 terminals  
19          that allow biodiesel at the terminal right now  
20          and that's across the country.

21          Pennsylvania has, to the best of my  
22          research, around a hundred terminals and we're  
23          not allowing any producer in this group, which  
24          are all producers in the state, none of us are  
25          at a terminal right now.

1           So a mandate, what that does, that at  
2           least forces us at the terminal, forces the  
3           product at the terminal, not our product in  
4           particular.

5           So that's why we support the mandate of  
6           getting that, so we can at least get out there,  
7           because the number one question we always get  
8           once we educate on what our product is is where  
9           can I get it. And that's why the mandate is,  
10          in our view, (inaudible), but without the  
11          incentive it's not going to be our product and  
12          that's why we're encouraging the committee and  
13          the legislature, as they pass this bill, they  
14          include it in the Senate mandate for biodiesel  
15          as they go forward.

16          SENATOR WHITE: It's my understanding that  
17          your group is opposed to including renewable  
18          diesel in any such mandate for production  
19          subsidy like such is being developed by Conoco  
20          Phillips.

21          If our goal is to offset the imports, why  
22          should the legislature discriminate against  
23          various products?

24          MR. WOOTTON: The research done that we  
25          have off the Conoco Phillips proposal and their

1 product, it's still a petroleum product. They  
2 have a joint agreement with Tyson Foods to use  
3 chicken fat and use a percentage of chicken  
4 fat. And I understand it's a small percentage,  
5 less than five percent.

6 At the end of the day whatever product  
7 they're making, the spec on that is 975, which  
8 is petroleum diesel. It is still a petroleum  
9 product.

10 So what we're talking about as a group is  
11 not apples and apples. We're taking a hundred  
12 percent chicken fat and making a hundred  
13 percent biodiesel with it and that's what we're  
14 trying to produce, alternative, which would be  
15 energy independence. They're taking a small  
16 portion, still coming out with petroleum. So  
17 the main concern is it's not apples and apples,  
18 it's not the same product.

19 What I would suggest is you look at -- you  
20 have renewable fuels and you have alternative  
21 fuels and, clearly, some fuels make sense in  
22 better parts of the country because of  
23 feedstock issues or whatever else, but I think  
24 the focus needs to be, when you're dealing with  
25 a limited source of public funds, you need to

1 spend these funds where it's needed.

2 And right now renewable energy gives you  
3 both renewable and alternative, biodiesel gives  
4 you clean energy, it's got a positive energy  
5 balance to it, that the focus should be there.  
6 And since the need is there, that's where the  
7 money should go to.

8 A petroleum company right now has a lot of  
9 money. We're paying record prices for a barrel  
10 of oil and record prices at the pump and  
11 they're making record profits. That's not a  
12 coincidence. That's happening for a reason.

13 So what we'd like to see as a producers  
14 group is let each fuel stand on its own two  
15 feet and its own merits and argue the benefits  
16 for our state. And it may be some approach, a  
17 two-tier approach, a tier one for renewables  
18 and mandates related to that and then you have  
19 a tier two, which is alternatives.

20 And I think coal -- we're not against the  
21 ConocoPhillips' definition, but it's definitely  
22 not our same product. So we support the coal  
23 as well, coal to diesel fuel, but it's not the  
24 same, it's not the same definition as  
25 biodiesel.

1           So we think there should be some type of a  
2           tier or a Class A, Class B and separate  
3           mandates, but, really, the mandate purpose for  
4           us is to get on the racks and enforce petroleum  
5           to allow us to get out to the distribution  
6           system.

7           SENATOR WHITE: Any other questions?  
8           Senator Don White.

9           SENATOR DON WHITE: Thank you, Madam  
10          Chairman. You represent a statewide  
11          organization, correct?

12          MR. WOOTTON: Correct.

13          SENATOR WHITE: I was in Erie a few weeks  
14          back and visited a plant. Are they a member of  
15          your organization?

16          MR. WOOTTON: They were originally part of  
17          our group in the very beginning. And another  
18          group, Fry-O-Diesel, you may have heard of  
19          that, in the Philadelphia area, at the time  
20          both those companies were struggling to get  
21          themselves together, off the ground. I didn't  
22          pry into why they had to back out, but they had  
23          backed out. Both are not producing  
24          commercially yet, but we have talked to Brad  
25          Davis, who's the principal there, but they're

1 not producing, no.

2 SENATOR DON WHITE: I'm just curious,  
3 because I spent roughly two hours touring their  
4 facility, and I am a very large supporter and  
5 fan of biodiesel, especially as opposed to  
6 ethanol, but in that two hours I never heard  
7 one time, and they were very close to being  
8 operational; in fact, I think they are on a  
9 limited basis already, I'm almost sure they  
10 are, I never once heard anything about anything  
11 per-gallon productions. They never talked to  
12 me about that. I mean, there were three  
13 senators there. I'm surprised that never came  
14 up.

15 MR. WOOTTON: I can't comment on their  
16 thought process.

17 SENATOR DON WHITE: So I just wanted to  
18 bring that out. I mean, I'm still in support,  
19 but I just find it ironic that that wouldn't  
20 have been part of their immediate agenda.

21 MR. WOOTTON: Well, it will be, I can tell  
22 you that. Once they start opening their doors  
23 and they can't sell their fuel, that will be a  
24 big concern. That's the only company, when  
25 they do come on line, and I heard it's now down

1 to weeks when they will be in full production,  
2 but that's the only place in the state right  
3 now that's equity backed, backed by an equity  
4 firm.

5 Now, everything that's being produced here  
6 are your mom and pop type organizations. It's  
7 all Pennsylvania doing it. So I don't know if  
8 they're willing to have deep pockets, write off  
9 the losses for the year. I can't comment. If  
10 they do come on line, I will definitely contact  
11 them.

12 SENATOR DON WHITE: Thank you.

13 SENATOR WHITE: Senator Dinniman.

14 SENATOR DINNIMAN: I apologize for having  
15 to leave, but Senator Musto and I both were  
16 needed elsewhere, but I believe when I walked  
17 in you were talking about the ConocoPhillips  
18 product?

19 MR. WOOTTON: Yes.

20 SENATOR DINNIMAN: I spent a great deal of  
21 time this summer trying to understand it. If I  
22 understand it correct and the reason this  
23 two-tier system would be necessary is that  
24 while we want two percent to be initially  
25 biodiesel, in that formulation only one-half

1           percent ends up actually being biodiesel,  
2           actual, actual nongas biodiesel.

3                    Can you explain a little what the  
4           difference in formulation is? It was sort of  
5           hard for me to understand because of the  
6           mathematics of the formula, but I was surprised  
7           how little actual biodiesel ends up in that  
8           formulation.

9                    MR. WOOTTON: I'm very leery to comment on  
10          other companies, but we reached out to them and  
11          asked them exactly to try to explain their  
12          product and we haven't gotten an answer.

13                   The definition that you just presented is  
14          the same definition that we understand as well.  
15          And they're going around using the two percent  
16          mandate and trying to make us look like it's  
17          apples to apples, where their product is going  
18          to have one and a half or two percent on the  
19          chicken fat and it will process an alternative  
20          product.

21                   And petroleum, they're saying it's the B2  
22          that we're talking about right now, the  
23          biodiesel, and it's not. Actually, we use 100  
24          percent biodiesel. That's what we're talking  
25          about in our two products.

1           Our product on the left is 100 percent, I  
2           think a hundred pounds of chicken fat and ten  
3           pounds of cattle litter, 100 pounds of  
4           biodiesel and ten pounds of glycerin. You take  
5           one and a half or two percent or whatever the  
6           number is of chicken fat and 98 and a half  
7           percent petroleum and that's their product.

8           And that's what they want to try to  
9           piggyback on with our fuel and we're saying  
10          it's not the same product, they can't do it,  
11          but we support if they want to try a separate  
12          mandate.

13          Here's the thing. There's not enough  
14          feedstock to get us to a B20 right now. Now,  
15          there's technology, in answering -- or  
16          commenting on the Senator's question before of,  
17          you know, the time it's going to take for our  
18          state and our country to get energy  
19          independent.

20          All the countries that are now energy  
21          independent, it started out with the old  
22          embargo and it took them 30 years to get there,  
23          Denmark, Brazil, whoever else is on that list.

24          So we have to start somewhere. And for  
25          biodiesel right now it's two percent blend.

1           It's not because you can't run a hundred  
2           percent of the product in your vehicle or burn  
3           it in your home, it's because we can't make  
4           enough of it right now to satisfy anything  
5           higher than B20 and really right now we can't  
6           satisfy anything higher than a B10.

7           So I think what would be good is maybe  
8           working just with alternative fuels in  
9           conjunction with renewable fuels, is to get the  
10          coal liquid and renewable diesel fuels and have  
11          that here, too, to help us get beyond -- when  
12          we max out with renewables (inaudible).

13          SENATOR DINNIMAN: Well, let me say I had  
14          an opportunity to meet with the CEO, it's a  
15          huge company, ConocoPhillips, and his sincerity  
16          of effort, understanding that the oil industry  
17          -- his point was the oil industry can no longer  
18          actually meet the growing demands without  
19          alternatives, no opposition to alternatives,  
20          actual supporter of solar, supporter of wind  
21          power.

22          The formulation, you know, had to be  
23          challenged a little to understand, but I think  
24          it would be helpful, Madam Chairman, if either  
25          Patrick or Richard, if we could find out

1 exactly what this formulation is all about,  
2 because maybe what we need is the various  
3 tiers, as you're suggesting, and at least the  
4 members of the committee would know what we  
5 need, because my understanding is yours, that  
6 the molecule was different and you drew this  
7 thing, and it was fascinating work, but I think  
8 if we as a committee understood it it would be  
9 helpful. Thank you, Madam Chair.

10 SENATOR WHITE: Any other questions,  
11 Senator?

12 SENATOR BRUBAKER: Very quick follow-ups,  
13 if I may. I heard oil today is \$82 a barrel  
14 and I heard you testify that the true cost of  
15 petroleum is about \$650 a barrel and we've  
16 heard that. I'm sorry?

17 MR. WOOTTON: I've read reports, that it  
18 states it somewhere.

19 SENATOR BRUBAKER: My question is could  
20 you identify those reports and get it to the  
21 committee?

22 MR. WOOTTON: Yes.

23 SENATOR BRUBAKER: Two, I heard you say  
24 237 percent return on investment, when we make  
25 an investment in a subsidy for your industry,

1           there's a 237 percent return. Is that what you  
2           said in your testimony? If you could supply  
3           that document, too.

4           And then my final question is you're  
5           asking for a dollar a gallon for biodiesel  
6           specifically. Do you have an opinion on that  
7           subsidy being extended to ethanol? Are you  
8           positive, negative or neutral to that?

9           MR. WOOTTON: Neutral on it. I personally  
10          support all renewable fuels in here. As I said  
11          earlier, some fuels make more sense than others  
12          to go after and I think that's what we should  
13          start with, first steps out of the gate and  
14          focus on that.

15          I think there's a place for ethanol, as  
16          well as -- I mean, it's going be a toolbox  
17          effect. To get the biodiesel is not going to  
18          solve the problem. Ethanol is not going to  
19          solve the problem, hydrogen. It's going to  
20          take all these energy sources and then some to  
21          get what we need to get, but at least taking  
22          those first steps takes us in the right  
23          direction and that's what you guys have to  
24          decide.

25          SENATOR WHITE: Thank you, gentlemen.

1           MR. HENDERSON: Our next witness is Matt  
2           Ehrhart, Pennsylvania Executive Director of  
3           Chesapeake Bay Foundation.

4           MR. EHRHART: Good morning, Chairman White  
5           and members of the Committee. Thank you for  
6           allowing me the opportunity to speak this  
7           morning. On behalf of the Foundation and our  
8           190,000 members, I just want to -- we  
9           appreciate this opportunity to discuss this  
10          very critical issue.

11          You have copies of my testimony and I've  
12          also -- Senator Brubaker, I should let him  
13          introduce this document. The Chesapeake Bay  
14          Commission recently, very recently just brought  
15          out biofuels in the bay, getting it right to  
16          benefit farms as far as the Chesapeake, which  
17          is an impressive and up-to-date compilation of  
18          the information surrounding a lot of specific  
19          biofuels issues and I urge you to take a look  
20          at it. I think there's a lot of pertinent  
21          information on the options.

22          There's a second document, biofuels and  
23          water quality that sort of document the  
24          outcomes of a number of meetings at the USDA  
25          Beltsville ag research facility. There's some

1 overlap and there's some difference, but I  
2 think a lot of good information on both.

3 I will not go through all the written  
4 comments, but I want to note that the  
5 Chesapeake Bay Foundation strongly supports the  
6 alternative fuels, and, obviously, cleaner  
7 alternative fuels not only address energy  
8 independence and carbon issues, but also  
9 promise less pollutants in our water and air.

10 Of particular interest to CBF are nitrogen  
11 sources that impact the bay directly. It's  
12 been pretty well documented in the discussions  
13 already that the biofuels issue doesn't exist  
14 in a vacuum, that our decisions and our  
15 strategy to transition over the next five to  
16 ten years impact air and water quality, the  
17 economic drivers in our state, our  
18 competitiveness in a number of business sectors  
19 now and certainly in the future as we try to  
20 position Pennsylvania in the best position for  
21 the future.

22 I think some of the questions that have  
23 been asked already really have gotten into the  
24 right details of understanding the true costs  
25 and benefits of the different opportunities,

1           how they go into petroleum fuels and how to  
2           cobble together a strategy that makes sense in  
3           the transition and effort long term.

4           I do want to note that I think it's  
5           extremely important not to simply respond to  
6           the existing landscape, but to be very active  
7           as a state in the federal arena.

8           Particularly right now there's a new  
9           federal farm bill under negotiation that's  
10          going to have some very significant impacts,  
11          probably hundreds of millions of dollars being  
12          funneled into discrete ag-related bioenergy  
13          initiatives.

14          It's very important that Pennsylvania as a  
15          state work towards and lobby for the priorities  
16          that we see benefitting Pennsylvania. There's  
17          been some good discussion about biodiesel and  
18          ethanol and how they relate and where the  
19          different subsidies, how that plays out.

20          And I think the farm bill and, obviously,  
21          other legislative -- federal legislation and  
22          policy work that's going to happen in the next  
23          decade is going to have a significant impact on  
24          how Pennsylvania moves ahead and what makes the  
25          most sense in terms of cost effectiveness for

1 Pennsylvania business and industry.

2 We should also keep in mind from a liquid  
3 fuels and transportation standpoint that there  
4 are other alternatives being worked on out  
5 there. The previous gentleman mentioned  
6 hydrogen briefly. Obviously, that's a little  
7 bit off in terms of timing, but, you know,  
8 we're currently converting some of the hybrid  
9 vehicles into plug-in hybrid vehicles, which  
10 would allow us to use our off-peak energy  
11 generation, electric generation to fuel  
12 vehicles, which may be able to meet the  
13 commuting radius for a lot of the general  
14 public.

15 So there's transportation issues that may  
16 get to other fuel sources than simply liquid  
17 fuels in the future. And I don't claim to be  
18 an expert on biofuels, but the Foundation and  
19 the Pennsylvania Office of Chesapeake Bay  
20 Foundation have been actively engaged in this  
21 national discussion on biofuels from a water  
22 quality perspective primarily and from I think  
23 a broader interest in keeping well managed  
24 agriculture strong in the landscape so we have  
25 the ability to grow food and fuels in the

1 future.

2 And it's important to note the potential  
3 that biofuels hold for the ag sector. I'm sure  
4 Joel will address this probably in a little  
5 more in-depth, but the opportunity to grow  
6 crops with a significant profit margin could be  
7 a welcome reprieve from years of pretty  
8 marginal income for our ag sector.

9 And the flip side of that is, obviously,  
10 as corn prices increase, the feed prices for  
11 our livestock sector pinch that sector a little  
12 bit. So we will need to balance food and fuels  
13 going forward. And as the previous gentleman  
14 said, we still need everything we can get and  
15 more to get to our goals in terms of energy and  
16 we'll have to continue to develop better crops  
17 and better processes to do that.

18 On ethanol specifically, you know, we're  
19 looking at an additional 100,000 acres of corn  
20 grown in the state this year, primarily in  
21 response to the anticipated higher prices and  
22 demand from ethanol.

23 There are questions. We don't know  
24 whether it's land that was in other grow crops,  
25 whether it's land that was out of production,

1 will folks try to apply more fertilizer in an  
2 attempt to seek higher yields and maximize  
3 their profitability.

4 So some of these questions that address  
5 water quality concerns, there are certainly  
6 things we know how to do. They're simply  
7 questions because we don't know exactly how  
8 it's playing out in the landscape, but they are  
9 important to raise.

10 These reports that I mentioned earlier  
11 really do a thorough job of talking about how  
12 we can grow more fuel in our agricultural  
13 sector and do it in an environmentally  
14 sensitive manner. I don't think there's any  
15 argument that it can be done. It will just  
16 take a little bit of thoughtful oversight and  
17 education to make sure that it does get done.

18 Obviously, the real impetus from a lot of  
19 the environmental community and others is to  
20 make this transition to cellulosic ethanol as  
21 quickly as possible.

22 Some of the concerns, obviously, around  
23 production and agriculture are remediated a  
24 little bit as we can make that transformation,  
25 but also looking at growing different crops

1 through the forest industry for cellulosic  
2 ethanol production.

3 There are already groups, Penn State  
4 University, Pennsylvania Environmental Council  
5 and others who are looking at how to grow  
6 biomass crops on abandoned minelands,  
7 effectively restoring the abandoned minelands  
8 and generating alternative energy  
9 opportunities.

10 Win-win has been perhaps one of the most  
11 overused and abused terms in some of our policy  
12 discussions lately, but this really is an  
13 opportunity with the federal mining money  
14 that's going to be coming in for reclamation to  
15 think through the environment and alternative  
16 energy together to maximize the impact of that  
17 federal legislation.

18 A few years ago biodiesel was the  
19 discussion. It was on the tip of everybody's  
20 tongue. It was right after the E85 vehicles  
21 started to come out and everyone realized that  
22 their mileage was about 50 percent less than  
23 regular fuel, so it triggered a little bit of  
24 backlash.

25 I want to say that while it's been sort of

1 the stepchild in federal discussions to  
2 ethanol, we're very appreciative that in  
3 Pennsylvania there are entrepreneurs, DEP and  
4 many supporters in the legislature who have  
5 helped move biodiesel forward.

6 When you look at our state and you look at  
7 the trucking fleet, the agricultural and  
8 industrial sectors that use a lot of diesel,  
9 the next generation of automotive diesels,  
10 which are very high mileage, you know, I think  
11 we need to make sure that this discussion  
12 receives the attention it needs both in state  
13 and federally, at the federal level, in the  
14 farm bill and other energy discussions, that  
15 we're talking about ethanol and it doesn't get  
16 lost in the conversation. The big square  
17 states in the mid west are certainly going to  
18 be pushing ethanol federally.

19 I'd also note that in addition to  
20 traditional biodiesel there's thermochemical  
21 conversion processes to create biodiesel from  
22 essentially combustion and low or nonoxygen  
23 atmospheres. The term is called pyrolysis.

24 Folks at Virginia Tech and the Virginia  
25 Waste Solutions Forum are currently working on

1 taking that technology from a lab scale to the  
2 real world with a reactor that can go farm to  
3 farm and generate combustible oil from manure,  
4 from excess poultry litter.

5 So there is still technology that's I  
6 think in its infancy that may play an important  
7 role in the conversation, particularly for  
8 states that have large volumes of excess  
9 organic waste or slaughterhouse waste organics.

10 And that in particular is documented in  
11 the biofuels and water quality document and  
12 it's been really a broad partnership down there  
13 to pursue that.

14 I think the one thing that has certainly  
15 been established here, and we knew it coming  
16 in, was biofuels as an issue is going to evolve  
17 over the next five years, decade, perhaps  
18 longer. And Pennsylvania is challenged to do  
19 things in the short run which get us  
20 kick-started and headed in the right direction  
21 while keeping that end game in sight and  
22 having, you know, an adaptive management  
23 approach to be able to get us where we need to  
24 be down the road and to position the  
25 Commonwealth in the best position possible.

1           The state is uniquely positioned  
2           geographically and it's sort of been noted  
3           before that we have the potential to generate  
4           large quantities of biofuel and to do it in  
5           close proximity to a lot of population centers.

6           So we do have some advantages nationally  
7           compared to states in the mid west. And we  
8           really need to take advantage of that and use  
9           that to grow our economy, grow our jobs and be  
10          thoughtful about protecting our natural  
11          resources as we do that.

12          As I wrap up, I do want to say I'm not  
13          sure that I'm in the best position to speak  
14          directly to the mandates and the levels of  
15          goals in the mandates. Certainly, you've got  
16          speakers from the industry, from other sectors.

17          I do think it's important to look at where  
18          the state stands in relation to the federal  
19          initiatives and our goals for the future and to  
20          be bold on this issue, to set the incentives  
21          and leadership in place to catapult  
22          Pennsylvania to a leadership role.

23          Pennsylvania has shown repeatedly that we  
24          have the capacity to lead the way with new  
25          technology and I think this is a great

1 opportunity to do so and really establish  
2 Pennsylvania as an energy leader for the next  
3 century. Thank you. I'll take any questions.

4 SENATOR WHITE: Senator Musto.

5 SENATOR MUSTO: Thank you. Reviewing the  
6 map, it appears Virginia has a biodiesel  
7 mandate. Has your organization found any  
8 impacts on water quality as a result of that  
9 mandate or are you giving a very careful study  
10 of the mandate?

11 MR. EHRHART: We have not been directly  
12 involved with their biodiesel mandate. I will  
13 say that we've had discussions with Virginia's  
14 State Department of Natural Resources on the  
15 relative impacts of soybean production for  
16 biodiesel and corn production for ethanol.

17 Corn is sort of inherently a less  
18 efficient user of nutrients than soybeans are.  
19 So while we can manage them, it tends to be  
20 easier to deal with water quality concerns  
21 around growing beans for biodiesel than corn  
22 for ethanol. That's a broad generalization and  
23 we can accommodate it either way in the  
24 agriculture sector.

25 SENATOR MUSTO: I have no further

1 questions.

2 SENATOR WHITE: Senator Brubaker.

3 SENATOR BRUBAKER: I believe I heard the  
4 Secretary of the Department of Environment,  
5 Secretary McGinty say when it comes to making  
6 -- she may have said ethanol specifically, but  
7 I think she said some pollutants were up and  
8 some pollutants were down.

9 You're with the Cheseapeake Bay Foundation  
10 and essentially interested in water quality,  
11 and water quality is a function of air quality,  
12 but you are a supporter of renewable fuels,  
13 such as biodiesel and ethanol.

14 So has your organization internally done  
15 the kind of analysis that gives you the  
16 authority to speak on the environmental impact  
17 of these fuels?

18 MR. EHRHART: We've not commissioned any  
19 independent studies ourselves. We've been  
20 watching the same studies come out, as  
21 everybody else has, and I think there are some  
22 remaining questions on a number of issues.

23 SENATOR BRUBAKER: But you have concluded  
24 that the biofuels that we're speaking about are  
25 equal or better to the environment of the

1 Chesapeake Bay Water Program alternatives. Is  
2 that accurate?

3 MR. EHRHART: Yes, I think that's true in  
4 a broader context, sort of surpassing some of  
5 the explicit details. When you look at  
6 particularly in Pennsylvania, we know keeping a  
7 bulk of the land mass in ag production,  
8 forestry is much better in the big picture than  
9 converting to a lot of sort of sprawling  
10 development. It also has less infrastructure  
11 costs.

12 So the things that we can do that combine  
13 alternative fuel growth and keeping those  
14 sectors viable in the landscape have longer  
15 term benefits, they're broader.

16 I think the details of those essentially  
17 combustion effects that are still being  
18 researched and need to be resolved are things  
19 that technology can address, and if not  
20 immediately, certainly through time while  
21 setting up a landscape that benefits all of us  
22 in the long run.

23 SENATOR BRUBAKER: Is it accurate to say  
24 that your organization's primary pollutant  
25 focus is nitrogen phosphorus and sediment? And

1 if that's accurate on biodiesel specifically,  
2 is there a specific impact on nitrogen  
3 phosphorus?

4 MR. EHRHART: On biodiesel specifically,  
5 we believe that it will be -- I guess the  
6 caveat is in a well managed ag setting, which  
7 we know is achievable, we believe we can have a  
8 net improvement in nitrogen and phosphorus.

9 SENATOR BRUBAKER: And you testified, and  
10 I think I heard from Secretary Wolff as well,  
11 100,000 of acres of additional corn planted in  
12 Pennsylvania as a result of the speculative  
13 market on corn.

14 Is it one of your recommendations to  
15 counter that from an environmental perspective  
16 that additional cover crop acreage be planted?

17 MR. EHRHART: We'd like to see those acres  
18 managed appropriately and cover crop is  
19 certainly part of that. There's a number of  
20 tools. As I said before, it sort of depends  
21 where those acres went into production what the  
22 appropriate tools are.

23 SENATOR BRUBAKER: So are there crops in  
24 the Chesapeake Bay, what is it, 64,000 square  
25 miles, is that correct?

1 MR. EHRHART: Correct.

2 SENATOR BRUBAKER: And what portion of  
3 that watershed is within Pennsylvania?

4 MR. EHRHART: Pennsylvania encompasses  
5 about 45, 46 percent of that 64,000 square mile  
6 watershed.

7 SENATOR BRUBAKER: Okay. A significant  
8 number, by any stretch. So as we move toward  
9 more biofuels, ultimately agriculture is  
10 shifting its crop practices.

11 And you're saying that you have confidence  
12 that agriculture has the internal capability to  
13 make minor and major qualifications to its crop  
14 practices so as to yield a neutral or an  
15 enhanced environment for the Bay. Is that  
16 correct?

17 MR. EHRHART: That's correct. I think  
18 that's particularly true in Pennsylvania.  
19 Virginia and Maryland, where they grow a lot  
20 more grain and are actually now seeing a much  
21 higher increase in corn production this year in  
22 Pennsylvania, it's, you know, a little more of  
23 a challenge.

24 SENATOR BRUBAKER: Final question is you  
25 talked about alternative feed stocks. Can

1           Pennsylvania farmers count on your organization  
2           to be a partner with them and partner with an  
3           extension to academics and other farm-based  
4           organizations to -- so when it's time to turn  
5           the on switch on, that we have the right kind  
6           of technologies and education ready to go and  
7           planning procedures so that if one producer  
8           wants to switch to alternative crops to  
9           generate more feed for these fuel sources, that  
10          they can count on you to be a working partner?

11                 MR. EHRHART: We're working on it now and  
12                 we'll continue to in the future.

13                 SENATOR WHITE: I have no questions.  
14                 Thank you. This is very interesting, by the  
15                 way.

16                 MR. HENDERSON: Our next witness is Joel  
17                 Rotz, Director of State Governmental Relations  
18                 for the Pennsylvania Farm Bureau.

19                 MR. ROTZ: Good morning. And thank you  
20                 for the opportunity to testify before you this  
21                 morning. I am Joel Rotz, Director of State  
22                 Governmental Relations for the Pennsylvania  
23                 Farm Bureau. The Farm Bureau represents over  
24                 42,000 rural and farm families across the  
25                 state.

1           Our members have adopted many policies  
2           supporting research, development and  
3           utilization of alternative and renewable fuels  
4           in the state. While it is no secret  
5           agriculture stands to gain from the advancement  
6           of renewable fuels, our members also support  
7           renewable fuel development as a means to  
8           increase our national security by helping to  
9           reduce our dependence on foreign oil.

10           Pennsylvania Farm Bureau supports adoption  
11           of House Bill 1202 to assist in leading the  
12           Commonwealth towards energy independence.  
13           A study released last summer from LECG, which  
14           was completed by John Urbanchuk, highlights  
15           some economic impact to the state if we were to  
16           go forward and at that time the discussion was  
17           900 million gallons, displacing 900 million  
18           gallons of petroleum-based transportation fuel  
19           with renewable fuels by the year 2017. That  
20           was projected to add 14.8 billion to our state  
21           gross product and support creation of over  
22           25,000 new jobs. The impact for local farmers  
23           was to increase prices 10 to 20 cents per  
24           bushel.

25           Since the time this report was released

1           last summer, as was pointed out earlier, the  
2           national demand for corn has raised the price  
3           of corn to exceed \$4.00 per bushel. However,  
4           as production of corn expanded in response to  
5           the higher prices, corn prices have already  
6           moderated considerably, at least the last I  
7           checked, for the 2007 crop to between \$3.25 to  
8           \$3.50 per bushel. Soybean prices are running  
9           historically strong at over \$8.00 per bushel.

10                  Farmers who grow corn and soybeans for  
11           cash crop are very happy with the change in the  
12           market prices. Farmers who purchase grain and  
13           soybean products to feed livestock and poultry  
14           are quite as pleased, as you can imagine.

15                  Despite the diverging effects of the  
16           soybean and corn markets among our membership,  
17           support for advancing renewable fuels remains  
18           strong within our ranks. That may well be  
19           largely due to the fact that other market  
20           forces are also working to the favor of our  
21           poultry, livestock and dairy producers.

22                  I need to point out to you that long  
23           before the recent increases in corn prices, red  
24           meat supplies were on the decrease due to  
25           earlier periods of strong production,

1 production which drove down prices, and  
2 currently red meat production is growing  
3 despite the higher feed costs because prices  
4 remain strong.

5 For poultry production, low prices in 2006  
6 decreased production and now that's helped  
7 strengthen markets today, but, again, this  
8 adjustment was made long before the corn price  
9 increase.

10 Dairy farmers are currently receiving  
11 record milk prices due to reduced production  
12 resulting from extremely low milk prices the  
13 past few years. At the same time, worldwide  
14 demand for dairy products has exploded, driving  
15 milk prices to new highs.

16 The news media accounts have been very  
17 inaccurate in their coverage of recent milk  
18 price and food price increases consumers are  
19 experiencing. At Farm Bureau we have adopted  
20 the term "cornfusion" to describe the erroneous  
21 accounts of how ethanol production and corn  
22 prices are driving up food costs.

23 While many choose to point the finger at  
24 ethanol production as the driving force for  
25 increases, the truth is that other supply and

1 demand forces as well as increased energy costs  
2 that are raising prices.

3 It is unlikely that production of meat and  
4 milk has been affected by higher corn prices to  
5 date. In fact, there is little evidence that  
6 any food category has been affected by higher  
7 corn prices in any significant manner.

8 Certainly it is true that food product  
9 manufacturers have claimed higher corn prices  
10 are increasing their manufacturing costs and  
11 using that as justification to raise their  
12 prices.

13 A notable example might be a cereal  
14 company that makes some variety of Corn Flakes.  
15 The value of corn going into a box of Corn  
16 Flakes previously was estimated to be 2.2  
17 cents.

18 Even if the cost of corn doubled, as it  
19 has, it's hard to understand how this relates  
20 to an increase of 10 to 20 times that much in  
21 the price of a box of cereal. It's far more  
22 plausible that the cost of energy is the  
23 legitimate factor in rising prices today.

24 From the farm and along every step of the  
25 way in the food processing chain, energy costs

1           have skyrocketed. It is ironic that while some  
2           try to blame ethanol for high food prices, it  
3           is really energy costs that are a primary  
4           concern in raising cost to consumers, which  
5           ethanol production will help solve.

6           I'd like to summarize in my next paragraph  
7           that if you look at the consumer price index,  
8           the impact of higher food prices is really not  
9           what the media has made it out to be. What  
10          higher grain prices do cause is greater  
11          reliance on the market to set prices rather  
12          than taxpayer-funded government support  
13          programs.

14          While farmers have had to rely on  
15          government supports to stabilize their markets  
16          many times over the years, I can assure you  
17          that all farmers would rather rely on the  
18          market to provide fair and equitable pricing  
19          related to cost of production.

20          I'll point out to you that under the 2002  
21          Federal Farm Bill, corn, soybean and wheat  
22          growers received \$14 billion per year from  
23          marketing loan and countercyclical payments.  
24          The Congressional Budget Office is estimating  
25          that those same programs will come at a cost of

1           \$200 million in the next farm bill because of  
2           the increased prices in the marketplace.

3           Any increase in food prices are going to  
4           be more than offset by the diversification of  
5           our energy supplies, lower farm program  
6           payments and the improved environmental effect  
7           of utilizing ethanol. It's a win-win situation  
8           for consumers, farmers and taxpayers.

9           Concerns are being raised by environmental  
10          interests related to possible environmental  
11          impact of more land including some  
12          environmentally sensitive land being utilized  
13          to grow corn.

14          While there's no disputing the fact that  
15          corn does take more nitrogen and other higher  
16          inputs than many other crops, the corn can  
17          still be grown with minimal environmental  
18          impact with proper implementation of nutrient  
19          management, conservation and erosion and  
20          sedimentation plans.

21          Farmers are constantly being held to  
22          higher standards of compliance in these areas  
23          and Pennsylvania Farm Bureau believes it is  
24          misguided to assume more production translates  
25          to additionally harmful environmental impacts.

1           Corn-based ethanol is the reality of today  
2           and it would be extremely nearsighted to not  
3           recognize that evolving technologies will  
4           advance other types of production. Of course,  
5           this was discussed earlier.

6           Pennsylvania will have much to gain when  
7           cellulosic ethanol becomes commercially viable  
8           and many predict that the viable technologies  
9           will be available within the next five years.  
10          This technology will greatly diminish the  
11          perceived concern of food versus fuel debate in  
12          the future.

13          Pennsylvania's vast forest resources and  
14          environmentally sensitive lands can be more  
15          fully utilized in providing raw materials for  
16          that type of ethanol production.

17          Much attention is given to ethanol  
18          production in this meeting. However, in  
19          Pennsylvania the fact remains that no ethanol  
20          plants are in operation at this time or in the  
21          near future.

22          What do exist are at least the six  
23          biodiesel plants or at least six biodiesel  
24          plants in the state. And you heard their  
25          concerns earlier and I'd just emphasize that

1 Pennsylvania Farm Bureau believes that that  
2 investment needs to be made in preserving the  
3 plants that we do have.

4 It would seem to be misguided to be  
5 concerned about pumping money into new plants  
6 and new initiatives whenever we have an  
7 opportunity to preserve what we already have  
8 going in this state.

9 Pennsylvania's Farm Bureau supports  
10 protecting and building a future for biodiesel  
11 production in the state by providing a  
12 substantial incentive for Pennsylvania  
13 biodiesel producers to compete with other  
14 states.

15 This incentive, as it was pointed out  
16 earlier, would be a direct subsidization, would  
17 only be needed for a limited time until  
18 production levels reach that 30 million gallon  
19 production trigger for the biodiesel mandate  
20 identified in House Bill 1202.

21 In summary I'd just say that Pennsylvania  
22 Farm Bureau supports the provisions of House  
23 Bill 1202 in advancing our renewable fuel  
24 industry and gaining energy independence in the  
25 state and nation. Don't be caught up in the

1 cornfusion that undermines efforts to expand  
2 ethanol and other renewable fuel production.

3 Cellulosic ethanol is a few years around  
4 the corner and holds even greater promise for  
5 Pennsylvania. There are environmentally sound  
6 practices that agriculture can and does use to  
7 meet the food, fiber and fuel needs of the  
8 future.

9 Let's preserve and grow the renewable fuel  
10 industry in this state and stay focused on the  
11 need to become more energy independent in the  
12 Commonwealth and the United States. Again, I  
13 thank you for your consideration with this  
14 important initiative.

15 SENATOR WHITE: Senator Brubaker.

16 SENATOR BRUBAKER: Thank you, Mr. Rotz,  
17 for your excellent testimony. You concluded by  
18 saying that the Farm Bureau supports a  
19 \$1-a-gallon subsidy to the biodiesel industry  
20 in Pennsylvania, correct?

21 MR. ROTZ: I didn't really specifically  
22 mention the dollar, but we do believe the  
23 industry makes a compelling case for the  
24 dollar.

25 SENATOR BRUBAKER: And the industry is

1           saying that it needs to be a dollar; therefore  
2           -- that's what I heard the industry say, it  
3           needs to be a dollar to be competitive.  
4           Therefore, you still don't have a position on  
5           the price subsidy?

6           MR. EHRHART: I said we're supportive of a  
7           subsidy and the industry indicates that -- we  
8           think it makes a compelling case for a dollar.  
9           So I guess, in essence, what I'm saying, yes,  
10          we support the dollar.

11          I'm just saying we, as Farm Bureau, don't  
12          really have a way of knowing what the magic  
13          number is, but we think the industry has made a  
14          good case.

15          SENATOR BRUBAKER: Do the current laws  
16          allow the prep land to be harvested?

17          MR. ROTZ: No.

18          SENATOR BRUBAKER: And if we need to turn  
19          on prep land, this land that's set aside, prep  
20          land, if we need prep land to be turned on to  
21          generate fuel sources, would Farm Bureau be  
22          supportive or not supportive of that kind of a  
23          move?

24          MR. ROTZ: That's tough to say. I don't  
25          think we have any policy direction just yet.

1 I'm assuming that we would be. Obviously,  
2 though, I think we do have to be concerned  
3 about the more environmentally sensitive lands.

4 You know, I think the better uses for prep  
5 land in many cases, especially when there's  
6 steep slope, et cetera, would be the cellulosic  
7 approach.

8 SENATOR BRUBAKER: Thank you. You  
9 mentioned cellulosic several times. The fact  
10 that we don't have active operating cellulosic  
11 facilities in the United States (inaudible)?

12 MR. ROTZ: That's my understanding, too,  
13 yes.

14 SENATOR BRUBAKER: And are you saying that  
15 cellulosic technology is just five years out?

16 MR. ROTZ: That's what many are  
17 predicting, yes.

18 SENATOR BRUBAKER: Therefore, it would be  
19 your recommendation, if we're building ethanol  
20 plants today and they're corn-based, that they  
21 be built so that they can adapt as readily as  
22 possible to cellulosic technology?

23 MR. EHRHART: I'll just answer that this  
24 way. If I was a person making an investment in  
25 these plants, I would think that would be the

1 wise way to go, yes.

2 SENATOR BRUBAKER: Finally, I think an  
3 awful lot of wise people do believe that  
4 cellulosic technology is certainly coming.  
5 It's not going to be Pennsylvania technology  
6 only, but it's going to be a global effort to  
7 ensure that this technology lands on the ground  
8 and gets fully integrated.

9 So will your organization continue to be a  
10 very strong advocate to assist Pennsylvania  
11 producers to ramp up, to grow the new kinds of  
12 crops that might be necessary to fuel those  
13 cellulosic plants when and if they come on line  
14 in Pennsylvania?

15 MR. ROTZ: Certainly. I think we all know  
16 for a fact there's an awful lot of land in  
17 Pennsylvania that's better suited for that type  
18 of crop than row crops, such as corn.

19 SENATOR BRUBAKER: Thank you.

20 SENATOR WHITE: Senator Dinniman.

21 SENATOR DINNIMAN: You quote this study  
22 from LECG. So I know the source, what is that?

23 MR. ROTZ: You know, I looked at it  
24 myself. It's not an acronym, as far as what  
25 LECG stands for, but I do know that they are a

1 well known research group when it comes to  
2 renewable fuels.

3 SENATOR DINNIMAN: Maybe what you can do  
4 is send us a note so we know it, because it's  
5 making some tremendous statements here about  
6 the economic impact and I believe they to be  
7 correct, but it's important that this committee  
8 knows the basis of the source for that.

9 MR. ROTZ: Sure, I can send you the study.

10 SENATOR WHITE: I was going to say,  
11 perhaps you would send me the study and then  
12 I'll send it to the members of the committee.

13 MR. ROTZ: We'll do that.

14 SENATOR DINNIMAN: You used the word, was  
15 it prep land? With the Chair's permission, may  
16 I ask my colleague to tell me, is that to set  
17 aside agriculture land? What exactly is that?

18 SENATOR BRUBAKER: Help me, but I do  
19 believe that current prep is C-R-E-P,  
20 Conservation Reserve Enhancement Program. Is  
21 that correct?

22 MR. ROTZ: That's correct.

23 SENATOR BRUBAKER: It's land where  
24 producers are financial incentivised to take  
25 sensitive lands, environmental sensitive lands

1 out of production and keep it in some type of a  
2 permanent grass-based cover.

3 SENATOR DINNIMAN: Also, maybe the  
4 solution in terms of that is somewhere in the  
5 middle, to protect the environment and yet is  
6 it possible to substitute cellulosic fuels to  
7 that?

8 SENATOR BRUBAKER: Yes.

9 SENATOR DINNIMAN: Thank you. Thank you,  
10 Madam Chairman.

11 SENATOR WHITE: Thank you very much.

12 MR. HENDERSON: Our next witness is Nathan  
13 Willcox, Energy and Clean Air Advocate,  
14 PennEnvironment.

15 MR. WILLCOX: Good morning. Thank you for  
16 the opportunity to speak today. As you may  
17 know, PennEnvironment is a non-profit,  
18 non-partisan environmental advocacy  
19 organization with roughly 15,000 citizen  
20 members across Pennsylvania.

21 We're very pleased to be able to speak  
22 before you today on the important issue of  
23 biofuels in Pennsylvania. To summarize my  
24 statement, sustainably-produced biofuels are a  
25 potentially important tool in the fight to cut

1 air pollution, reduce our dependence on fossil  
2 fuels and tackle the problem of global warming.

3 For these reasons, PennEnvironment  
4 applauds the efforts of Governor Rendell and  
5 many state legislators to promote biofuels  
6 production in Pennsylvania.

7 There are, however, several flaws with the  
8 current legislation that we see and we are  
9 eager to work with lawmakers to correct these  
10 flaws.

11 Specifically, PennEnvironment feels  
12 strongly that coal to liquids or liquid coal  
13 should not be a part of any biofuels proposal,  
14 that there should be a global warming pollution  
15 standard for any biofuels program and that  
16 there needs to be more focus on the long-term  
17 promotion of cellulosic ethanol than exists in  
18 the current legislation.

19 By way of background, despite recent  
20 advancements in the production of clean,  
21 renewable energy in the Commonwealth,  
22 Pennsylvania, much like the rest of the country  
23 and the world, is still far too dependent on  
24 fossil fuels to meet our energy needs. This is  
25 especially true in the case of our

1 transportation sector, where petroleum is  
2 essentially the only fuel source used to power  
3 our cars and trucks.

4 To summarize the next three pages, the  
5 concerns we are most concerned about with  
6 regard to the impact of that dependence would  
7 be smog pollution. That's the type of  
8 pollution triggering asthma attacks and which  
9 hangs over many communities in Pennsylvania on  
10 our hottest summer days.

11 Soot pollution, that's the type of  
12 pollution associated with both our power plants  
13 and diesel vehicles. Specifically, it's the  
14 type of pollution that cuts short the lives of  
15 thousands of Pennsylvanians each year.

16 Finding a global warming solution.  
17 PennEnvironment regards global warming as the  
18 most pressing environmental issue facing us  
19 today. Pennsylvania creates more global  
20 warming pollution than any other state besides  
21 Texas and California. And so we do feel that  
22 we have a role to play in finding a global  
23 warming solution here at home.

24 Thankfully, biofuels offer a tremendous  
25 opportunity for Pennsylvania to cut these

1 levels of air pollution and will also provide a  
2 boost to the state's agricultural sector and  
3 decreasing our dependence on oil.

4 This testimony walks through the main  
5 types of items being discussed, as well as  
6 their advantages and disadvantages from an  
7 environmental perspective.

8 With regard to corn ethanol, from an  
9 environmental and economic perspective, corn  
10 ethanol has both positives and negatives. The  
11 largest obvious economic benefit is a decrease  
12 in petroleum use.

13 With regard to smog pollution, the use of  
14 corn ethanol in high-percentage blends like E85  
15 produces fewer smog-forming emissions from the  
16 tailpipes of vehicles than gasoline.

17 Conversely, the use of low-percentage corn  
18 ethanol blends like E10 can actually increase  
19 emissions of smog-forming pollutants from  
20 vehicles as compared to regular gasoline.

21 With regard to global warming pollution,  
22 current methods of corn ethanol production  
23 yield modest reductions in global warming  
24 pollution, roughly 13 percent compared with  
25 gasoline.

1           These benefits can be significantly  
2           affected by the methods used to produce corn  
3           ethanol. For instance, the use of no-till and  
4           organic agriculture can improve the global  
5           warming pollution profile of corn ethanol.

6           Conversely, the use of coal rather than  
7           natural gas to provide heat for ethanol  
8           refineries, a production method being promoted  
9           by some in Pennsylvania, eliminates the global  
10          warming pollution benefits of corn ethanol use.

11          Given these environmental benefits and  
12          impacts, PennEnvironment views corn ethanol as  
13          an important vehicle for advancing biofuels in  
14          Pennsylvania, but not an end goal in the  
15          biofuels effort.

16          With regard to cellulosic ethanol,  
17          researchers believe that cellulosic ethanol  
18          will significantly outperform corn ethanol on  
19          every measure of environmental sustainability.

20          Specifically, cellulosic ethanol could  
21          reduce life-cycle global warming pollution by  
22          at least 40 percent over gasoline. Energy  
23          crops, such as switchgrass, are also superior  
24          for sequestering carbon in the soil. With  
25          regard to smog pollution, the impacts of

1 cellululosic ethanol use are roughly the same as  
2 those for corn ethanol.

3 Because of the many environmental  
4 advantages of cellululosic ethanol,  
5 PennEnvironment feels that the advancement of  
6 cellululosic ethanol should be a central part of  
7 any state-level biofuels policy in  
8 Pennsylvania.

9 With regard to biodiesel from an  
10 environmental perspective, production and use  
11 of biodiesel produces significant reductions in  
12 petroleum use, as well as total fossil fuel  
13 energy consumption.

14 Biodiesel also produces lower life cycle  
15 global warming pollution, between 40 to 60  
16 percent less, than conventional diesel fuel.  
17 However, as with corn ethanol, poor  
18 agricultural practices can erode or reverse the  
19 global warming benefits of biodiesel.

20 With regard to soot pollution, biodiesel  
21 produces up to 50 percent less fine particle  
22 soot pollution than conventional diesel fuel.  
23 However, biodiesel also results in an increase  
24 in smog-forming pollution as compared to  
25 conventional diesel fuel.

1           Finally, one obstacle that exists to  
2           producing huge amounts of biodiesel is that oil  
3           crops like soybeans produce far less energy per  
4           acre than cellulosic sources or corn, meaning  
5           that a dramatic expansion of biodiesel  
6           production could lead to land-use conflicts  
7           with agriculture or environmentally sensitive  
8           lands.

9           For these reasons, PennEnvironment feels  
10          that biodiesel holds many environmental  
11          advantages over conventional diesel and should  
12          be a part of any state-level biofuels effort.  
13          At the same time, any state-level biofuels  
14          effort should recognize the limits to a  
15          dramatic expansion of biodiesel production.

16          With regard to the main alternative fuels  
17          legislation currently before the legislature,  
18          PennEnvironment agrees that the time is right  
19          for promoting biofuels in Pennsylvania, but we  
20          see several serious flaws with the  
21          legislation's current language.

22          And I'll briefly walk through these  
23          concerns, as well as potential solutions to  
24          these concerns, and we are anxious to work with  
25          legislators and the Rendell administration to

1           implement these solutions in the coming weeks  
2           and months.

3                     First, liquid coal. The legislation  
4           contains a provision allowing fuel suppliers to  
5           meet the biodiesel requirement with coal to  
6           liquids or liquid coal fuel, a transportation  
7           fuel produced from coal.

8                     Liquid coal is an incredibly expensive  
9           technology that creates roughly twice as much  
10          life-cycle global warming pollution as  
11          conventional fuels.

12                    For example, using liquid coal in a hybrid  
13          car would mean doubling the carbon dioxide  
14          emissions from that vehicle, which would be  
15          equivalent to operating a Hummer H3 on  
16          conventional gasoline.

17                    And as a state and as a nation, we cannot  
18          afford to be implementing policies that promote  
19          new ways to increase global warming pollution.  
20          I am also submitting with my testimony an  
21          opinion piece from the Cato Institute opposing  
22          liquid coal technology for financial reasons,  
23          as well as a letter signed by 12 of the leading  
24          state and national environmental and  
25          conservation organizations urging the removal

1 of the liquid coal provision from House Bill  
2 1202 and Senate Bill 789.

3 As a solution, PennEnvironment urges  
4 lawmakers to remove the liquid coal option in  
5 the alternative fuels legislation. We can  
6 avoid incentivizing an increase in global  
7 warming pollution, while still accomplishing  
8 all of the stated purposes of the legislation  
9 by promoting the use of sustainable biofuels  
10 and not liquid coal.

11 With regard to global warming pollution,  
12 biofuels can achieve significant reductions in  
13 global warming pollution, but farming and  
14 production methods can lessen or completely  
15 eliminate these potential reductions.

16 This is especially true in the case of  
17 processing ethanol using power from coal  
18 instead of natural gas. The current  
19 legislation lacks significant safeguards  
20 against the potential for Pennsylvania's  
21 promotion of biofuels to create an increase in  
22 global warming pollution.

23 As a solution, PennEnvironment urges  
24 lawmakers to add a global warming pollution  
25 standard to this legislation. This standard

1 would require all alternative fuels qualifying  
2 for credit under this legislation to achieve  
3 life-cycle global warming pollution levels a  
4 certain percentage lower than conventional  
5 fuels.

6 Biodiesel with regard to cellulosic  
7 ethanol. There are two important steps that  
8 Pennsylvania should take to realize the promise  
9 of cellulosic ethanol. The first is to prepare  
10 the state's infrastructure to accommodate  
11 increasing biofuels use in the years to come.  
12 The second is to take prudent steps to promote  
13 the production and use of cellulosic ethanol  
14 specifically once the technology has been  
15 commercialized.

16 Unfortunately, the legislation's current  
17 language fails to achieve these goals. With  
18 regard to infrastructure development, the  
19 legislation imposes a per-gallon requirement  
20 for ethanol blending and by doing so misses an  
21 opportunity to expand the state's  
22 infrastructure for delivering and using higher  
23 blends of ethanol, like E85, that are both more  
24 environmentally beneficial and can accommodate  
25 the use of greater quantities of cellulosic

1 ethanol when it becomes available.

2 Because all cars and fueling stations can  
3 use E10 today without any changes in technology  
4 (whereas, the use of the E85 does require  
5 changes in vehicles and fueling stations), this  
6 scenario could result in Pennsylvania meeting  
7 this legislation's biofuels requirement without  
8 making any of the infrastructure changes in  
9 vehicles and fueling stations necessary to  
10 accommodate E85.

11 Second, there are no specific requirements  
12 for cellulosic ethanol or extra credits given  
13 to promote the technology. Just like lawmakers  
14 wisely included specific support for solar  
15 power within Pennsylvania's Alternative Energy  
16 Portfolio Standard, there should be similar  
17 specific support for cellulosic ethanol within  
18 our biofuels policy.

19 As a solution, PennEnvironment urges  
20 lawmakers to consider several options for the  
21 promotion of cellulosic ethanol within the  
22 biofuels legislation.

23 The first option would be to create an  
24 ethanol requirement based on overall sales  
25 volume instead of the current language's

1 requirement that every gallon of gasoline  
2 contain at least 10 percent ethanol. This  
3 would encourage the production and distribution  
4 of higher ethanol blends like E85 because a  
5 percentage requirement on the total sales  
6 volume could be met more quickly if more E85  
7 was being produced and distributed, as compared  
8 to lower blends like E10.

9 The second option would be to create a tax  
10 incentive for the production and distribution  
11 of E85. And finally an option would be to  
12 create a specific, steadily increasing  
13 carve-out for cellulosic biofuels.

14 In conclusion, biofuels must play a role  
15 in efforts to combat air pollution and global  
16 warming pollution from our transportation  
17 sector and we applaud Governor Rendell and the  
18 state legislators for working to promote a  
19 policy in Pennsylvania which will boost the  
20 production and use of biofuels in the  
21 Commonwealth.

22 PennEnvironment is, however, very  
23 concerned with the aspects of the legislation I  
24 highlighted and their potential negative  
25 impacts on Pennsylvania's environment.

1           We look forward to working with  
2           legislators and the Rendell administration to  
3           resolve these issues and move forward with the  
4           promotion of biofuels in Pennsylvania. Thanks  
5           again for the opportunity to testify and I'd be  
6           happy to answer any questions.

7           SENATOR BRUBAKER: Thank you very much for  
8           your excellent testimony. You have a lot of  
9           information in here. It's going to take some  
10          time, at least for me, to digest this.

11          Specifically, you talked about  
12          agricultural advantages by shifting to a  
13          no-till style of farming. Is that what you  
14          said?

15          MR. WILLCOX: Yes. Well, I said  
16          specifically with regard to global warming  
17          pollution you achieve a better benefit.

18          SENATOR BRUBAKER: Thank you. And is  
19          there any benefit on an annualized basis  
20          whether that no till is one year and done or  
21          does it need to be a no-till standard and stay  
22          a no till in order to yield those kind of  
23          benefits?

24          MR. WILLCOX: That's where my knowledge of  
25          agriculture comes up short and I'd honestly

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

have to actually refer to other folks on that.

SENATOR BRUBAKER: Could you generate that response for me, please, outside this meeting?

MR. WILLCOX: Yes.

SENATOR BRUBAKER: I appreciate that. You referred a lot to greenhouse gases, did you not, in your testimony?

MR. WILLCOX: I did.

SENATOR BRUBAKER: And are the greenhouse effects on this planet yielded as a result of greenhouse gases and is it true that CO<sub>2</sub> and nitrous oxide and methane are among the big players in those gases?

MR. WILLCOX: That's correct.

SENATOR BRUBAKER: And is it true that nitrous oxide has about 300 percent greater warming effect to the planet's earth than what does CO<sub>2</sub> and methane has about 20 times the greenhouse effect as what CO<sub>2</sub> has?

MR. WILLCOX: Those numbers sound in the ballpark. I can't verify them specifically, but yes.

SENATOR BRUBAKER: Can you get back to me on that as well?

1 MR. WILLCOX: Sure.

2 SENATOR BRUBAKER: And specifically to the  
3 issue we're talking about today. So we're  
4 talking about greenhouse gases being CO2,  
5 nitrous oxide and methane, correct?

6 MR. WILLDOX: Correct.

7 SENATOR BRUBAKER: Specific to the topic  
8 we're talking about today, how does biodiesel  
9 and ethanol impact those three gases?

10 MR. WILLCOX: Well, I think the one thing  
11 to remember is that while the percentages --  
12 the impacts that you cited are correct, the  
13 fact remains that the vast majority of the  
14 global warming pollution being produced today  
15 is in the form of carbon dioxide.

16 So when we look at pollutants of specific  
17 concern, carbon dioxide is the number one  
18 pollutant we looked at.

19 SENATOR BRUBAKER: By volume?

20 MR. WILLCOX: Correct, correct. Even when  
21 you factor in the --

22 SENATOR BRUBAKER: The concentration  
23 effect?

24 MR. WILLCOX: Exactly. Carbon dioxide is  
25 still the biggest problem because the other

1 pollutants are a lesser amount than carbon  
2 dioxide.

3 SENATOR BRUBAKER: So, therefore,  
4 biodiesel and ethanol production, in your view,  
5 does, indeed, have an impact on CO2 emissions?

6 MR. WILLCOX: That is correct.

7 SENATOR BRUBAKER: And can you walk us  
8 through that very briefly, please, how that  
9 occurs?

10 MR. WILLCOX: Sure. It basically just has  
11 to do with compared to gasoline. It's a  
12 petroleum-based fuel. When you burn petroleum  
13 you get carbon dioxide.

14 SENATOR BRUBAKER: Is petroleum a  
15 plant-based product?

16 MR. WILLCOX: No. When I say petroleum I  
17 mean oil.

18 SENATOR BRUBAKER: So oil is not a  
19 plant-based product?

20 MR. WILLCOX: In the very long, extended  
21 version of things, yes.

22 SENATOR BRUBAKER: Now I'm confused. It  
23 is or is not a plant-based product?

24 MR. WILLCOX: Oil is produced from --

25 SENATOR BRUBAKER: Is it plant-based?

1           MR. WILLCOX: In the extended view of  
2 things, yes, it is plant-based in that it's  
3 made from the cane plant material.

4           SENATOR BRUBAKER: So petroleum is a  
5 plant-based product?

6           MR. WILLCOX: In the extended view of  
7 things, it's not traditionally known as a  
8 plant-based product.

9           SENATOR BRUBAKER: If it would not be  
10 plant-based, then where would its origin emerge  
11 from?

12          MR. WILLCOX: Again, I think we're kind of  
13 getting into semantics here. All I'm saying is  
14 that when we burn oil it's coming from deposits  
15 of oil which were formed long ago from the  
16 decomposition of plant material.

17          What I'm getting at in all of this is that  
18 when you burn petroleum versus producing  
19 biomass and producing biofuels, the CO2 impact  
20 from those two processes are very different.  
21 You get a much higher global warming pollution  
22 level, specifically carbon dioxide, from  
23 burning petroleum than from burning biofuels.

24          SENATOR BRUBAKER: And can you generate  
25 documentation on the volumes of those

1 differences, please?

2 MR. WILLCOX: Sure.

3 SENATOR BRUBAKER: Thank you. I really do  
4 appreciate your cooperation.

5 MR. WILLCOX: Sure, my pleasure.

6 SENATOR WHITE: I share your enthusiasm  
7 for cellulosic ethanol, which, of course, is  
8 not here yet, but you seem to say that we're  
9 missing an opportunity in this legislation to  
10 lay the groundwork for -- and could you be a  
11 little more specific as to what you think we  
12 need to do with regard to the infrastructure?

13 MR. WILLCOX: Yes. I think, first, as far  
14 as the big picture, our basic thought process  
15 is this. Once cellulosic ethanol comes on  
16 line, we want to be able to bring as much of it  
17 as possible into the Pennsylvania market.

18 And so if we have an infrastructure that's  
19 set up only for E10, that means that the  
20 maximum percentage of cellulosic ethanol that  
21 will be able to blend into any ethanol will be  
22 10 percent as opposed to if we have the  
23 infrastructure set up for 85, we'll be able to  
24 blend 85 percent cellulosic ethanol. So we'll  
25 be able to bring in much larger quantities.

1           That's as far as the context for what we hope  
2           to achieve.

3                   How we hope to achieve that I think is  
4           that we need to come up with a biofuels  
5           proposal that, A, incentivizes the  
6           infrastructure necessary for E85, but then, B,  
7           either through incentives or through mandates,  
8           gradually increasing mandates for cellulosic  
9           actually gets that increase in production.

10                   SENATOR WHITE: When you say  
11           infrastructure, what exactly are you talking  
12           about? Are you talking about tanks, are you  
13           talking about pumps?

14                   MR. WILLCOX: It's vehicles and it's  
15           fueling stations. So the average vehicle today  
16           can run on E10; it cannot run on E85.

17                   SENATOR WHITE: I mean, we're not going to  
18           require people to buy vehicles for a fuel that  
19           doesn't exist?

20                   MR. WILLCOX: No, that's true, but the  
21           point is, E85 does exist. And so it's not  
22           cellulosic specific what you'd be requiring.  
23           You'd be requiring that the fueling structure  
24           and the vehicles could accommodate E85, which  
25           is a fuel that exists today. And then when

1 cellulose came on line, that 85 percent that  
2 is currently made up of corn ethanol would be  
3 replaced by cellulosic ethanol. So it would be  
4 85 percent cellulosic ethanol.

5 SENATOR WHITE: And you're talking about  
6 doing that over some period of time?

7 MR. WILLCOX: Correct. Obviously, a  
8 mandate for cellulosic tomorrow doesn't make  
9 any sense because, as you said, it doesn't  
10 exist.

11 SENATOR WHITE: Thank you. Any other  
12 questions?

13 SENATOR BRUBAKER: Brief follow-up.  
14 Cellulosic technology, we heard from earlier  
15 testifiers, is about five years out. Do you  
16 concur with that time line?

17 MR. WILLCOX: I've heard various  
18 estimates. I've heard as soon as five and I've  
19 heard longer estimates as well.

20 SENATOR BRUBAKER: Do we have a cellulosic  
21 facility within the United States?

22 MR. WILLCOX: Not to my knowledge, no.

23 SENATOR BRUBAKER: Can you and I work  
24 together to research that answer?

25 MR. WILLCOX: Absolutely.

1           SENATOR BRUBAKER: I understand Asia has a  
2           plant in the United States, a test plant, and  
3           I'd be really curious to determine if that's  
4           true. Are you saying that it is true?

5           MR. WILLCOX: I have heard that there are  
6           test plants out. As far as it not being on the  
7           market, I don't think there's any plant ready  
8           to produce market-ready in the volumes  
9           necessary for any sizeable influx into the  
10          market, but I think there are test facilities  
11          and I'd be happy to follow up with you on that.

12          SENATOR BRUBAKER: We hear so much about  
13          cellulosic technology. Are there other  
14          countries that are more advanced or have a  
15          current operating facility?

16          MR. WILLCOX: Not to my knowledge, no.  
17          It's still a technology that's in its infant  
18          development stages worldwide.

19          SENATOR DINNIMAN: You mentioned a global  
20          warming standard and you mentioned this in  
21          relationship to the type of biofuels that we  
22          put forth.

23          Are there examples where other states have  
24          created their global warming portfolios and  
25          standards in relationship to specific biofuels,

1 and, if so, could you provide us with that?

2 MR. WILLCOX: Yes. The one state that I  
3 know of that is -- they have it on the books;  
4 I'm not sure if it's taken effect yet, is  
5 California, as what they call a low carbon  
6 fuels standard.

7 The other thing I mentioned with regard to  
8 comments earlier about how this ties into the  
9 federal legislation, the main Senate biofuels  
10 legislation being considered right now also has  
11 a global warming pollution standard in its  
12 current version. So you could also look to the  
13 federal proposal. That, again, hasn't been  
14 passed, but the main biofuels legislation being  
15 considered at the federal level does have a  
16 global warming pollution standard.

17 SENATOR BRUBAKER: Well, this would be  
18 very helpful because then you're trying to  
19 advance an industry or a perspective on it in  
20 terms of biodiesel without doing damage to the  
21 environment. And so if there are other models,  
22 then that's useful to us and we'll certainly  
23 look at them, but if you can also send forth  
24 what you have, that's helpful as well.

25 MR. WILLCOX: I'd be more than happy to do

1           that.

2                       SENATOR DINNIMAN:  And the one thing about  
3           Senator Brubaker, this is a topic where he  
4           knows every single detail, as he's shown today.  
5           It was good sparring, by the way.  Both of you  
6           are very bright.  I congratulate both of you.

7                       SENATOR WHITE:  Thank you very much.  I  
8           believe that concludes the testimony for today.  
9           We have a second hearing scheduled for 9:30  
10          next Tuesday in the East Wing and we will  
11          continue this discussion.  So thank you to all  
12          the presenters and thank you for your  
13          attention.

14                      (Whereupon, the hearing concluded at 11:00  
15          a.m.)

16

17

18

19

20

21

22

23

24

25

## CERTIFICATION

Susan D. Kashmere, RPR, hereby certifies that the foregoing pages represent an accurate and complete transcription of the entire record of the proceeding before the Senate Environmental Resources and Energy Committee, Senator Mary Jo White, presiding, in the matter of Proposed Alternative Fuel Mandate, and these pages constitute a true copy of the transcript of the proceeding.

Filius & McLucas Reporting Service

By: \_\_\_\_\_  
Susan D. Kashmere,  
Reporter - Notary Public