

ORIGINAL

HOUSE OF REPRESENTATIVES
COMMONWEALTH OF PENNSYLVANIA

IN RE: HOUSE BILLS 120 and 125 - ALTERNATIVE FUELS

ABINGTON HIGH SCHOOL
970 HIGHLAND AVENUE
ABINGTON, PENNSYLVANIA

FRIDAY, APRIL 11, 2003, 12:30 P.M.

BEFORE:

HON. ELLEN BARD, CHAIRMAN
HON. CHARLES McILHINNEY
HON. KATE HARPER
HON. JACQUELINE CRAHALLA
HON. DAYLIN LEACH
HON. JAMES WANSACZ
HON. CURTIS THOMAS

LORRAINE K. TROUTMAN, RPR
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1 REPRESENTATIVE BARD: I would like to
2 call this hearing to order. We are here today
3 to consider testimony on House Bill 120 and
4 House Bill 125.

5 Just to provide a little bit of
6 background on this legislation, I think it is
7 very important to know that this legislation has
8 been developed in a bipartisan/bicameral manner.
9 And the legislation tries to be true to the
10 recommendations of this report of the Task Force
11 on 21st Century Energy Following for
12 Pennsylvania.

13 The Task Force was established under
14 the auspices of the Joint State Government
15 Commission as a result of House Resolution 224,
16 which was passed in June of 2001. The Task
17 Force consisted of 46 members from across the
18 State of Pennsylvania. These were experts from
19 all sectors of the community interested in the
20 environment.

21 We have energy producers. The energy
22 industry was well represented. We had the
23 environmental community and the academic
24 community as well as legislators. So the report
25 is a compendium of all of the recommendations

1 that we considered over the nine months that we
2 met, and we met about once a week -- I'm sorry,
3 once each month.

4 And we took four tours, site visits and
5 held public hearings in conjunction with two of
6 those site visits. We were able to cover the
7 state not only in terms of recommendations and
8 representation on the panel, but also in terms
9 of our actual site visits.

10 I think that is important to understand
11 as background to this legislation. We had kind
12 of an ad hoc reconvening of some of the members
13 who are willing to attend just kind of a meeting
14 after the panel had disbanded formally. And
15 they were questioned as to whether they felt
16 that the legislation really did reflect the
17 recommendations of the Task Force, and everyone
18 was unanimous in that feeling.

19 Of course, not everyone supports
20 each -- not every one of the panel members or
21 the Task Force members supports each piece of
22 legislation, but they did feel that the
23 legislation truly did reflect the
24 recommendations.

25 So what we are about now is to open

1 this legislation up to review input from the
2 wider community and perhaps move beyond the
3 recommendations of the panel, and this is the
4 first step in that process today.

5 And we are certainly very honored to
6 have a number of members from the Environmental
7 Resources and Energy Committee and to have such
8 wonderful representation and to have our
9 Secretary of DEP here with us today.

10 I would like, first of all, to
11 introduce or ask the legislators to introduce
12 themselves, starting off with Chuck.

13 REPRESENTATIVE McILHINNEY: Chuck
14 McIlhinney, from 143rd District in Doylestown.

15 REPRESENTATIVE HARPER: Kate Harper
16 from Eastern Montgomery County, a little west of
17 here.

18 REPRESENTATIVE CRAHALLA: Jackie
19 Crahalla from central to the west of Montgomery
20 County.

21 REPRESENTATIVE LEACH: I am Daylin
22 Leach, 149th District, southeastern tip of
23 Montgomery County.

24 REPRESENTATIVE BARD: Of course, I am
25 Representative Bard. I welcome you to my

1 district here in Abington Township. And also my
2 district includes about one third of Upper
3 Dublin Township.

4 We are very pleased to have a new
5 Executive Director of the Environmental
6 Resources and Energy Committee, and that is Joe
7 Dekliwski. We thank him very much for his
8 efforts to help put together our panels today.

9 Now, I would like to invite Secretary
10 McGinty to make her presentation and comments on
11 this wonderful legislation. And we welcome you
12 to our state government and are thrilled to have
13 you.

14 SECRETARY MCGINTY: Thank you very
15 much, Madam Chair and members of the committee.
16 I very much appreciate the opportunity to join
17 you here today and offer some comments for the
18 record on the important legislation that you
19 have before you today.

20 Madam Chair, with your indulgence, I
21 would like to repeat some of the things that you
22 gave me the opportunity to say earlier today in
23 the public forum, because I think it is
24 important to have some of these concepts on the
25 record as the legislature as a whole will

1 proceed to consider some of the important pieces
2 of legislation that you have put forward.

3 First, I want to commend you and this
4 committee, other members of the legislature who
5 have focused their time, effort and attention to
6 these critical matters of our energy security as
7 a country. Energy security has many dimensions
8 to it. One of the leading edges of energy
9 matters is environmental considerations. If we
10 are going to meet our environmental challenges,
11 we really do need to look at what our energy
12 situation is.

13 On the other hand, if we want to ensure
14 a robust, growing economy in the United States,
15 we also need to ensure that the life blood of
16 that economy, which is energy, is diverse,
17 robust and stable and growing itself.

18 And finally, I think as GO political
19 events tell us, if we want to be serious about
20 the national security of this country, we need
21 to be serious about the kind of legislation that
22 you all have before you today and that you are
23 working so hard to bring forward in the state of
24 Pennsylvania, because energy diversification is
25 part of the keys to our national security, so I

1 commend all of you for taking these subjects up
2 today.

3 I also want to note that the timing of
4 your work here is particularly important, not
5 only in the context of the geopolitical events
6 that are unfolding, but frankly in the context
7 of the national events that are unfolding.

8 As this committee is working hard to
9 draw upon American ingenuity and build American
10 technologies and diversify where our energy
11 sources come from, unfortunately the United
12 States Congress has just said no to advanced
13 energy technologies in the transportation sector
14 in voting against increased fuel efficiency for
15 automobiles, while at the same time trying to
16 pursue a policy that would sacrifice one of our
17 last great national wildlife refuges to fossil
18 fuel development. That is not a recipe for the
19 kind of energy security and energy
20 diversification that I think by contrast the
21 legislation that you have before you represents
22 here today.

23 I also want to say that outside of or
24 in addition to the four squares of environmental
25 considerations, national security considerations

1 as they relate to our energy dependence or
2 independence and our economic vitality.

3 Some of the legislation that you have
4 before you today makes another very important
5 contribution to the health and well-being of
6 this nation, and that is in aiming to support
7 school districts as they invest in alternative
8 fuels for their transportation fleet school
9 buses in particular and as they invest in what
10 is called green construction for school
11 buildings.

12 I think you are providing the
13 foundation for a tremendous investment in the
14 health and well-being of our children. The
15 statistics here are astounding. The number one
16 reason for a child to miss school today in the
17 United States of America is severe asthma
18 attacks.

19 Well, those asthma attacks are brought
20 on by environmental particulate matter. That
21 particulate matter itself comes from or doesn't
22 come from fuels that we use. If you switch to
23 CNG, for example, you then are using a fuel that
24 does not produce any particulate matter.

25 Similarly, in green construction, we

1 know now that when buildings are constructed
2 with a green or an energy efficient and
3 environmental design in mind, they typically are
4 buildings that have enhanced natural light and
5 very good circulation, air circulation.

6 When they have that enhanced natural
7 light, the studies show that students'
8 performance is dramatically improved and
9 enhanced; 20 to 30 percent increases in math and
10 reading ability when a school is naturally lit
11 as opposed to just having artificial fluorescent
12 lights.

13 And similarly, when a school is
14 constructed such that the -- that there is good
15 circulation and ventilation in the building, it
16 reduces the kinds of substances like molds and
17 dusts that have caused asthma and allergy among
18 our children and leads again to much healthier,
19 happier, productive classes in our schools and
20 certainly a wonderful investment in our
21 children.

22 Having said those general comments, let
23 me turn for one moment, if I might, to the
24 specific legislation before the committee; the
25 two pieces of legislation, HR 120 relating to

1 the AFIG program and HR 125 relating to the
2 green Schools program.

3 To speak to the Alternative Fuels
4 Incentive Grant program for a moment,
5 Representative Bard and I have had the
6 opportunity to have some very good discussions
7 about what has worked and what has not worked
8 with this program.

9 In these days of trying to meet our
10 state budget deficit, I want to start by clearly
11 saying the AFIG program is a good program. It
12 has produced very good results for the state of
13 Pennsylvania. What I hope this conversation is
14 about is just further enhancing the productivity
15 and effectiveness of the program.

16 By way of example, to date through the
17 AFIG program, the state has been able to invest
18 some \$20 million in projects across 35 different
19 counties; and with that \$20 million investment
20 by the state, we actually have leveraged it 3 to
21 1 and have realized \$60 million of private
22 sector investments that have come into our state
23 on the basis of the state having provided that
24 \$20 million in seed money.

25 There's more that we can do. First, I

1 certainly agree with the important provision in
2 the AFIG legislation here in HR 120 that would
3 take a serious look at the current cost share
4 provisions and structure of the program. I
5 think well intended when it was first initiated,
6 a provision of the program has become
7 counterproductive.

8 And that is, while it made sense to
9 anticipate that the cost of alternative fuel
10 technologies would come down so that the
11 percentage of the costs picked up by the state
12 could come down, unfortunately that transition
13 has not happened as quickly as we might hope.

14 And so now, the percentage, which is 20
15 percent that we can offer to invest in a
16 project, has been not sufficient to encourage
17 that private sector leverage and that private
18 sector investment. We do need to look at that
19 cost share provision of the AFIG program.

20 But two pieces that we would want to
21 discuss with you in a little more detail on
22 this, first, the precise percentages that are
23 proposed in the legislation, we think is worthy
24 of more discussion, as well as potentially we
25 would like to understand a little bit more of

1 the two-tiered structure that is built into HR
2 120.

3 Second, I also want to put the
4 Department on record very much in agreement with
5 the bill's definitions and moving towards a more
6 expansive definition of what constitutes an
7 alternative fuel.

8 I think all too often we have thought
9 singularly about natural gas when we think about
10 alternative fuels. For some fleets, natural gas
11 makes sense, but I do think that we have to be
12 careful about overly investing in, again, only
13 one fuel source.

14 The committee may be aware, for
15 example, on the power generation side that more
16 than 95 percent of every new power plant that is
17 being built in the country is being built to run
18 on natural gas.

19 Once again, we are moving towards an
20 overdependency on a single fuel source. So I
21 commend the committee of broadening the
22 definition of what we are talking about here.

23 Third and fourth on the AFIG
24 legislation, third point, administratively the
25 Department, I believe, owes this committee and

1 the legislature as a whole some modifications to
2 the way we have administered the program, and
3 specifically the application process involved
4 when a citizen would like to take advantage of
5 the rebate program we have or the grant program
6 we have for the purchase of a hybrid fuel
7 automobile.

8 And I know that Representative Bard has
9 run into this problem as she herself tried to
10 purchase such an automobile, only to find out
11 that for some reason our program currently is
12 structured such that someone has to apply for
13 the rebate before they purchase the car.

14 And we only allow them to apply for
15 that in certain windows. I think July is the
16 next window that you can make such an
17 application. Not to suggest that most auto
18 purchasing is impulse buying, but still that
19 kind of structure doesn't really track the way
20 we buy our automobiles and I am committing we
21 will change it.

22 Finally, I would like to discuss some
23 consideration of investment in stationary
24 sources of alternative fuel also in the AFIG
25 program, if for no other reason than with the

1 general budget state that we are in at the
2 moment, I don't see that we will have a whole
3 array, if any, alternative sources of funding
4 for stationary sources and stationary projects.

5 Finally, and briefly on the green
6 schools legislation, HR 125, several quick
7 points there. First, I couldn't agree more that
8 we need additional sources of funding there.

9 Currently, the Department of
10 Environmental Protection only has a million
11 dollars that we can put towards green buildings.
12 That is generally. That is not just for
13 schools.

14 But even that million dollars is going
15 away because it itself has three sources. One
16 is the general fund, and we all know now that
17 the general fund is not in the kind of shape it
18 needs to be in to increase money to any program.
19 And by contrary consideration, most programs are
20 being reduced.

21 Second source of funding comes from the
22 Federal Department of Energy through the state
23 energy plan. And unfortunately, the national
24 administration has cut investment in energy
25 efficiency and alternative energy technology.

1 So our share of the national pie has also been
2 cut by more than 5 percent this year.

3 And finally, we did have an Energy
4 Conservation and Assistance Fund that helped to
5 promote green construction, but that too was
6 premised on an oil surcharge settlement of a law
7 suit, which lawsuit and which settlement fund
8 itself has been drained.

9 So the short story is in terms of the
10 environmental protection resources to go towards
11 green construction, we really are seeing an end
12 to the pots of money that we have depended on to
13 date. So that commends, I think, in favor of
14 HR 125.

15 Now, having said that, part of the pots
16 of money that you draw on here come from the
17 Department of Education. And as much as I would
18 like to speak for the budgets of my colleagues
19 in the cabinet, I think that my survival depends
20 on my not doing so. So I would have to defer to
21 the Department of Education in terms of their
22 willingness to help fund the program.

23 One final and last point on a technical
24 matter, we would like to discuss potentially
25 giving differential grant moneys depending on

1 the level of lead certification that a building
2 is entitled to, and also enabling the lead
3 program itself to do the certification instead
4 of having the state do that.

5 Thank you very much for the opportunity
6 to share these initial comments, and I look
7 forward to your questions and some interaction.

8 REPRESENTATIVE BARD: Well, thank you
9 very much. I would like to begin the
10 questioning. Talking about House Bill 120,
11 talking about the biodiesel program, we have
12 experience with school districts, as we've heard
13 earlier in the energy symposium today, that have
14 converted their fleets to biodiesel. And in
15 some other states, they have been able to find
16 moneys that would subsidize that extra cost of
17 about 20 cents typically per gallon.

18 Now, currently House Bill 120 in the
19 AFIG program isn't set up to do that sort of
20 thing, to directly subsidize someone for using
21 alternative fuel.

22 The current AFIG program is really
23 oriented towards currently the infrastructure of
24 vehicles. I don't know if you can off the top
25 of your head say how the Department, the

1 administration, would view an expansion of House
2 Bill 122, encourage those sorts of incentives to
3 actually use alternative fuels.

4 SECRETARY MCGINTY: I think that
5 ultimately is the name of the game. If we are
6 making these things and no one is using them,
7 then we probably have failed in our exercise.
8 If there is a missing piece of the puzzle where
9 we need further incentive for the actual use and
10 deployment of the fuels, that is certainly
11 something we would love to talk to you about.

12 Now, we may have the opportunity to do
13 some differentiation among fuels. For some
14 fuels, the end use cost is the smaller part of
15 the equation. And where you really do need the
16 help is in the infrastructure side. But for
17 some other fuels, like in some instances
18 biodiesel, the infrastructure is the easy part,
19 which is part of the reason why we ought to be
20 doing these things yesterday.

21 These fuels are drop-in fuels. You can
22 put them right into a diesel engine today. So
23 in those instances where the infracture cost is
24 less and we're really looking at the fuel cost,
25 that may be an area that we should talk about

1 full incentives in that regard.

2 REPRESENTATIVE BARD: Now, I believe
3 there is about \$18 million in the AFIG account
4 at any time which has accumulated over the years
5 because of the rounding down of the percentage
6 reimbursement and because of some of the issues
7 that you've discussed in terms of the
8 administration of the program. And there has
9 certainly with budget times being what they are,
10 the downturn in the economy, have been a focus
11 on that \$18 million and the potential to use
12 that in other ways.

13 And I know you alluded in your
14 testimony to that. Do you have any sense as to
15 what would be an appropriate allocation of those
16 moneys and then going into the future as
17 to -- currently, this is funded on an ongoing
18 basis with the appropriate division of the
19 incoming revenue stream would be between the
20 focus on transportation, a sector that is so
21 extremely dependent on one source at the present
22 time, and a diverse range of projects and
23 options that would qualify under stationary
24 application.

25 SECRETARY MCGINTY: Well, let me back

1 up to the first part of your question, if I
2 might, and just underscore the value of this
3 program. I think we agree it needs some fine
4 tuning but it has worked well for Pennsylvania;
5 and as part of the issue of how we revitalize
6 the economy of the Commonwealth, the numbers are
7 important here.

8 The idea that we -- the idea and the
9 fact that we have been able to leverage 3 to 1,
10 bring private sector investment into the
11 Commonwealth's economy on the basis of the seed
12 moneys we've been able to provide through the
13 AFIG program, I think is very important and
14 justifies it as one of the tools we bring
15 forward to achieve economic revitalization of
16 the Commonwealth.

17 To move from that, though, to your
18 comment about a split between stationary and
19 mobile sources, I don't know that I would want
20 to offer a specific number. But if you were
21 willing to consider the concept, I think that a
22 small amount of the program could go a long way
23 in investing in the stationary side.

24 We now have several wind farms
25 proposed, for example, in the state. Those wind

1 farms have achieved a cost effectiveness such
2 that they are almost competitive with fossil
3 fuel generation. It is really a small
4 differential that needs to be made up through
5 grant-type programs.

6 So the formula that I would like to
7 work with you on is not one that would say up
8 front we are definitely setting aside X amount
9 for stationary sources.

10 It would be rather a formula that would
11 say, if we find a project that can be
12 economically viable, stand on its own two feet
13 but for some initial seed funding, and it's a
14 project for which there will be a substantial
15 private sector investment on top of whatever the
16 state puts in, then that is one that we would
17 like to consider under this program.

18 But I think, in any event, it would be
19 a very small percentage of the overall AFIG
20 program that we would like you to consider for
21 inclusion.

22 REPRESENTATIVE BARD: I appreciate your
23 comments on that. And, of course, House Bill
24 120 I should mention, which is not the subject
25 of our hearing today, was envisioned by the Task

1 Force as being a companion bill to 120, to
2 discuss and address the stationary source issue,
3 the stationary generation issue.

4 SECRETARY MCGINTY: Right.

5 REPRESENTATIVE BARD: Are there any
6 questions?

7 REPRESENTATIVE HARPER: I have a
8 question, because at the end of last session
9 this committee actually looked at reallocating
10 the money in the AFIG account, because there was
11 money there which is always a surprise when you
12 find more money than you find demand in state
13 government, that is a happy day and a rare one.

14 So we had talked as a committee about
15 actually funding more projects that were
16 building based; say, for example, switching a
17 hospital or other heavy user of energy to
18 something other than a fossil fuel or something
19 like that. And I think we actually passed one
20 of those amendments. But then it came out
21 later. How do you feel about that sort of a use
22 of the fund?

23 SECRETARY MCGINTY: I think precisely.
24 To be able, especially again in these budget
25 times, and I am aware of HR 121 that would have

1 exclusively focused on stationary sources, but
2 we have what we have right now which is the 18
3 million in AFIG. I think the kinds of projects
4 you are describing with small investment could
5 really be spurred by the AFIG program.

6 In fact, as Representative Bard knows,
7 Arlington Hospital is interested in a stationary
8 fuel cell. And there are many other potential
9 projects out that are looking for this kind of
10 seed money in order to come to fruition.

11 I think, again, the state has a
12 tremendous opportunity to help spur those
13 programs.

14 I was talking just yesterday, for
15 example, to one of the leading wind energy
16 manufacturers in the world. Now, wind energy is
17 the fastest growing source of energy in the
18 world today. That means there is lots of jobs
19 associated with building wind turbines. They
20 are looking for some incentive from the state to
21 site a major manufacturing facility of their
22 gear boxes that go to those turbines and to
23 create those jobs here in Pennsylvania.

24 I think if we were able to say to them,
25 hey, we have some money to bring to the table,

1 that would certainly increase their interest of
2 bringing that production and those jobs here to
3 the Commonwealth, which I think otherwise would
4 go someplace else.

5 REPRESENTATIVE HARPER: Thank you.
6 That is all I have.

7 REPRESENTATIVE BARD: Representative
8 Crahalla.

9 REPRESENTATIVE CRAHALLA: I will be
10 brief because I am a freshman and I'm new to
11 this whole situation. First of all, funding is
12 major, where the money is coming from, as I
13 spent my entire morning getting beaten up by the
14 library group.

15 I just wanted to ask, is there any
16 incentive -- this is not a state matter at
17 all -- by the government to have more of these
18 vehicles manufactured, because there does not
19 seem to be too much of a choice anywhere. And
20 this is what is going to be part of the problem.
21 As soon as you get more of one kind, the price
22 goes down.

23 Competition is so healthy. I am just
24 wondering, is there anything from the federal
25 end?

1 SECRETARY MCGINTY: I think what you
2 are spending your time here today on is part of
3 the answer to that. Because if we can enhance
4 consumer demand, then the manufacturers will
5 supply what the consumers are demanding.

6 Now, consumers have not demanded
7 alternative fuel technologies for two or three
8 reasons. One is the sense that, geez, didn't
9 they try that back in the 70's and none of those
10 things worked, and there is a sense of this is
11 stuff we shouldn't pursue. And what that misses
12 is 30 years of technological innovation where
13 these technologies really worked very well.

14 Secondly, though, has been that the
15 cost has been higher because they are new
16 technologies. You haven't achieved those
17 economies to scale, and I think that's where
18 these kinds of programs are critical, because
19 you can level the playing field. You can pick
20 up that \$1,000 or \$2,000 differential between a
21 hybrid vehicle, hybrid gas/electric vehicle, for
22 example, and your average gasoline vehicle.

23 I think the third thing is as we
24 enhance awareness that these cars are out there,
25 they are attractive to drive, and they help to

1 save consumers money also. As they see gasoline
2 prices increasing, you put some of those things
3 together, I think you have the recipe for the
4 increased demand that will then drive the
5 increased supply of the vehicles themselves.

6 REPRESENTATIVE CRAHALLA: I had to
7 recently buy a new vehicle and that was an
8 experience. And I did ask about this. And
9 apparently the only ones who might sell them,
10 this is Honda, and that is it, and they don't
11 have anything.

12 SECRETARY MCGINTY: Honda and Toyota
13 are leading the charge. And therein, again, I
14 think is a message to the U.S. economy. We have
15 seen this before where we've kind of dragged our
16 feet or stuck our head in the sand or not led
17 the charge on things. And frankly, we've had
18 our lunch handed to us by our foreign
19 competitors. And we're seeing that with hybrid
20 vehicles.

21 The issue actually with the Priuses,
22 the Hondas and Toyotas is not any more lack of
23 consumer interest or consumer demand, but they
24 can't keep enough of them in stock. They are
25 selling them so quickly that there are actually

1 sometimes several-month waiting lists for those
2 vehicles.

3 But I certainly do hope that the U.S.
4 auto manufacturers will pick up the pace and get
5 into the game.

6 REPRESENTATIVE CRAHALLA: Because I
7 personally would rather see that than rebating,
8 because again this is a tax base.

9 SECRETARY MCGINTY: Right.

10 REPRESENTATIVE CRAHALLA: In any way
11 they could ever get the big manufacturers, then
12 they can sell them to the consumers, because we
13 all know about advertisers.

14 SECRETARY MCGINTY: Right. It works.

15 REPRESENTATIVE BARD: Representative
16 Leach.

17 REPRESENTATIVE LEACH: Thank you,
18 Representative Bard. Just a comment and a
19 question.

20 The comment is to pick up on something
21 Representative Crahalla said: One of the ideas
22 that I have from time to time that awoke me with
23 a start earlier in the session was, I have a
24 vehicle from the state fleet. And I thought,
25 why not require that we phase in a percentage of

1 those as hybrid vehicles, you know, 10 percent
2 by 2006 or something.

3 So I called the research office, and
4 they indicated that there were no American
5 manufacturers of those, which, of course, would
6 cause me some problems in my district creating
7 demand of foreign cars at expense of American
8 cars, so I put that into the be reconsidered
9 later file.

10 The -- and the other -- the only other
11 update I have on that is just this weekend I was
12 watching CNN and they have the crawls along the
13 bottom of the screen. And one of the crawls
14 they had, apparently GM was working on a hybrid
15 car and they've abandoned it. And that was just
16 this weekend.

17 So -- I wish there was more reason, and
18 maybe you have some, for optimism that this was
19 going to be progressing in the near future with
20 good American alternatives for this.

21 If you want to respond to that, that's
22 fine.

23 SECRETARY MCGINTY: It's curious to
24 sort of talk about this as optimistic, but in
25 terms of the things that drive consumer demand,

1 the prices that we are seeing at the pump these
2 days, and as we go into the summer, driving
3 season, those are prices that begin to say to
4 people, look, we would like to see some option
5 or alternative.

6 In fact, just two days ago my new
7 neighbor outside of Harrisburg was telling me
8 that he's paying \$50 a week in gasoline. He
9 can't afford it anymore. He is trading in his
10 SUV for something else, and that is just driving
11 the children to school and things like that.
12 That is not long-distance driving.

13 If we start seeing those \$2 a gallon
14 price tags up there again at the fuel stations,
15 you know, I think it will drive demand and drive
16 U.S. manufacturers, too, to get on the
17 bandwagon.

18 REPRESENTATIVE LEACH: I hope you are
19 correct. To pick up again on what
20 Representative Crahalla says, it helps the
21 taxpayers, too. We get reimbursed for our gas
22 mileage. We are driving SUVs by and large.

23 REPRESENTATIVE CRAHALLA: Not me.

24 REPRESENTATIVE LEACH: I'm sorry. Two
25 young children, two car seats but -- well,

1 that's a whole other bill but so I am -- I would
2 like to see something in that regard.

3 The other question I have as I try to
4 ramp up on a lot of these issues as a freshman
5 myself is the lead standards.

6 SECRETARY MCGINTY: Yes.

7 REPRESENTATIVE LEACH: For the green
8 schools.

9 SECRETARY MCGINTY: Yes.

10 REPRESENTATIVE LEACH: What percentage
11 of schools, if you have any sense of it, that
12 are xed into today that would -- do we have a
13 bunch that are good environmentally conscious
14 groups?

15 SECRETARY MCGINTY: Well, the State of
16 Pennsylvania has been in the leadership role
17 across the nation in terms of pursuing lead
18 certification.

19 I think that Radnor Township schools
20 were among the first in the nation to be lead
21 certified. However, we are only just beginning.
22 There are five lead certified buildings in the
23 State of Pennsylvania, and I think 37 that are
24 registered for consideration.

25 But we do have some of the first. We

1 had some of the first schools. In Pittsburgh,
2 we had the first convention center that is lead
3 certified.

4 In my own department, none other than
5 one of our coal mining offices has been
6 redesigned, and it is the first lead building in
7 the entire nation to get what they call a gold
8 certification.

9 Now, talking about saving the taxpayer
10 money, that building uses less than 50 percent
11 of the energy than any of our comparable
12 offices.

13 We've added up. For some of the
14 buildings we've done energy retrofits, they are
15 saving us \$34 million a year in energy bills, so
16 these are very good investments.

17 REPRESENTATIVE LEACH: Thank you,
18 Secretary. Appreciate it.

19 REPRESENTATIVE BARD: We've been joined
20 by two additional members. If you would
21 introduce yourself and state where you are from.

22 REPRESENTATIVE WANSACZ: Representative
23 Jim Wansacz; Lackawanna, Luzerne, Wyoming and
24 Susquehanna Counties.

25 SECRETARY MCGINTY: Big territory.

1 REPRESENTATIVE WANSACZ: The great
2 northeast.

3 REPRESENTATIVE LEACH: Parts of New
4 York and Ohio also.

5 REPRESENTATIVE THOMAS: Kurt Thomas
6 from Philadelphia County.

7 REPRESENTATIVE BARD: Do either of you
8 have any questions for the Secretary?

9 REPRESENTATIVE WANSACZ: No, thank you.

10 REPRESENTATIVE THOMAS: Yes. First,
11 let me congratulate you and thank you for your
12 willingness to come to this process with some
13 energy, a big smile and some creativity.

14 SECRETARY MCGINTY: It's Friday.

15 REPRESENTATIVE THOMAS: At the end of
16 this term I would like to, you know, be able to
17 talk to you and see if, you know, things are
18 still on a high note. I wanted to talk to you
19 about clean air solutions.

20 SECRETARY MCGINTY: Thank you. Yes.

21 REPRESENTATIVE THOMAS: And ask you if
22 you have any familiarity with something that's
23 been coming up over and over again, and that is
24 what is being called a closed loop zero
25 hazardous emissions process.

1 SECRETARY MCGINTY: I do have some
2 familiarity with it, yes.

3 REPRESENTATIVE THOMAS: Is there an
4 interest within the Department to, through
5 grants or through some kind of intercapital fund
6 that would stimulate these kinds of products?

7 SECRETARY MCGINTY: Yes, there are
8 opportunities for those kinds of projects in
9 several different arenas. One is through our
10 traditional grant programs. There are several
11 programs that possibly could be used in this
12 regard.

13 But I would call to your attention an
14 opportunity that I spoke about in the earlier
15 session, which I think could work for this kind
16 of project as well, which is funds that the
17 Department realizes on the basis of imposing
18 penalties on those who violate the laws and
19 regulations. And those penalty moneys come into
20 a pot of money or a fund that we call community
21 environmental project fund, the CEP.

22 Now, when those funds -- and there is a
23 fund for clean air-related projects. There is a
24 fund for clean water-related projects. When we
25 impose those fines and those penalties and we

1 realize those moneys, then we are in a position
2 to receive applications from communities that
3 would benefit from and we could invest directly
4 in projects from those funds that would clean up
5 the air or clean up the water.

6 And we have a pretty appreciable degree
7 of flexibility there that can help us to address
8 the kinds of opportunities you are talking
9 about. But I also would say that there's a
10 tremendous potentially hidden, but I suspect it
11 is very much on your mind, benefit to this type
12 of technology or manufacturing process.

13 And that is, if we could design some of
14 our facilities such that they really are closed
15 loop and such that they really emit zero
16 hazardous pollutants, that gives us an
17 opportunity we haven't had.

18 And that opportunity is to site those
19 facilities where people live so that they could
20 actually go to work at those facilities. You
21 don't want a facility like that right next door
22 if it's emitting all kinds of hazardous
23 pollutants, but you surely want it there if it's
24 not emitting any of those hazardous pollutants
25 and it's creating a couple thousand jobs.

1 So for someone who is focused on
2 Philadelphia, per se, and the need to redevelop
3 brown fuels, for example, and bring jobs back to
4 where people actually live, there is a huge
5 opportunity; and that means that the bonding
6 money that the Governor is calling for in this
7 plan for a new Pennsylvania would very much be
8 appropriate to help invest in the kind of
9 project that you are talking about.

10 REPRESENTATIVE THOMAS: I totally agree
11 and I think in the long run it would definitely
12 make the air much cleaner and also allow for new
13 technologies that are being utilized but not
14 widely available to people. I think that, you
15 know, DEP along with, you know, other
16 departments should look at technologies as a way
17 to maximize new products and projects.

18 I would like to submit something to you
19 and have you take a look at it because it is an
20 exciting idea.

21 My second concern would run to the
22 Pennsylvania Green Program and whether or not
23 part of your interest -- you know, at one time
24 we had counties being able to make applications
25 to the Department for water treatment projects

1 that would make sure that our water was clean.

2 And then everything got kind of rolled
3 over into this rolling green air. And our water
4 treatment project was one of the projects
5 excluded from Growing Greener. And I would just
6 like to know where you see your department
7 coming in at on this whole notion of Growing
8 Greener.

9 SECRETARY MCGINTY: I think the issue
10 you point to is exacerbated by some provisions
11 of the budget that we've all had to put into
12 place in order to solve the fiscal problems that
13 the state has.

14 As you may be aware, we did have to
15 eliminate a grant program called the Sewage
16 Treatment Operated Grant Program. It was \$52
17 million. Philadelphia was one of the largest
18 recipients under that grant program.

19 And that means that there's even
20 further need for what you are talking about.
21 But given your leadership on this issue, let me
22 commit to you for the first time today that I
23 think Growing Greener is the place to look to
24 help find resources that can address some of
25 these water treatment projects.

1 And the Department has not to date put
2 a -- there have been some projects that have
3 been funded in that regard pursuant to Growing
4 Greener. But I would be happy to work with you
5 to look at Growing Greener, in this year
6 especially as we have lost that grant program,
7 in this year to try to ease that pain by
8 increasing the amount that would come out of
9 Growing Greener towards those kinds of projects.

10 So we will positively consider projects
11 of that nature this year pursuant to Growing
12 Greener.

13 REPRESENTATIVE THOMAS: Thank you.

14 REPRESENTATIVE BARD: Thank you very
15 much and thank you so much for being here. We
16 appreciate your testimony. And again, I would
17 like to thank Mrs. McGinty for sharing your
18 daughter on your birthday.

19 REPRESENTATIVE THOMAS: On whose
20 birthday?

21 SECRETARY MCGINTY: Hers. 81.

22 REPRESENTATIVE THOMAS: Happy birthday.
23 It's also my birthday.

24 MRS. MCGINTY: Happy birthday.

25 REPRESENTATIVE BARD: Our next panel is

1 a panel that will deal specifically with school
2 building issues primarily, although we do as
3 well have some representation again wonderfully
4 from the transportation sector as well.

5 Our lead speaker will be Dr. Amy Sichel
6 who is the Superintendent of Schools here in
7 Abington School District. We are very pleased.
8 Thank you again for the use of your facilities
9 and your wonderful hospitality today, and thank
10 you for being here to testify.

11 DR. SICHEL: Thank very much,
12 Representative Bard. It is my pleasure to be
13 here and speak with you this afternoon.

14 I am extremely pleased and proud to
15 talk about Abington School District's
16 incorporation of green building concepts and
17 features into our two new elementary schools
18 where construction will commence at the very end
19 of this summer. I want to be perfectly clear, I
20 don't claim to be an expert in this area. I am
21 just the deliverer of good news.

22 And I would like to attribute this
23 wonderful work to a terrific staff which is
24 under the direction of Dr. Leigh Altadonna, the
25 assistant superintendent; Mr. Stephen Saile, our

1 Supervisor of Facilities, Mr. Christopher
2 Lionetti, our assistant controller; Mr. Ed
3 Krantz, our clerk of the works.

4 But specifically, I would like to
5 recognize the work of Dwight Knouse, our lead
6 architect from Hayes Large, and Bill Hartland
7 from H.F. Lentz, who have very much helped us to
8 understand this process of a green concept, to
9 be able to put it forward to the Board of School
10 Directors, and most importantly to be able to
11 explain that it is not only good from an
12 environmental perspective, but we are going to
13 save money for the taxpayers of Abington.

14 As many of you do know already, in 2002
15 we opened a beautiful building called the Copper
16 Beach Elementary School. In the late 90's when
17 the architects designed and specified the
18 parameters of those buildings, we very much
19 wanted a green school concept, but it was just
20 too expensive. And we really could not wait for
21 that payback period because it was economically
22 prohibited at the time.

23 But, however, we continued to study and
24 investigate the latest trends in technology, and
25 we examined the decreasing costs over time. We

1 do now believe that it is not only desirable but
2 cost effective to incorporate the green designs
3 into the new buildings that we will start this
4 summer.

5 Our architects have defined sustainable
6 green designs for us as the following: It's the
7 systematic consideration, during design, of a
8 project's life cycle's impact on environmental
9 and energy resources. The tenet of sustainable
10 design is to use resources efficiently and
11 within their renewable limits.

12 In analyzing the sustainable design
13 concept, we looked at the benefits in three
14 areas.

15 The first was the benefit for our
16 users. Our architects have indicated that
17 studies do show the relationship between a
18 building's physical condition, such as indoor
19 air quality and lighting, and the health,
20 well-being and productivity of its users.
21 Sustainable design creates healthy indoor
22 environments for our students and all of our
23 staff members.

24 Secondly, the benefits to the school
25 district and the community. With a sustainable

1 green design, we realize reductions in
2 operational and maintenance costs. We created a
3 positive public image and helped set an example
4 to teach our students about conservation in a
5 very large and broad sense.

6 Thirdly, the green school concepts help
7 to minimize the impact of the construction
8 process on the environment through conservation
9 of natural resources, use of renewable energy,
10 and the reduction of energy consumption.

11 In designing the new Overlook and
12 Highland schools, we looked towards the
13 following and will select the following, we
14 hope, during our bidding process. We will
15 select materials that minimize safety hazards
16 and environmental impact. We will increase the
17 use of materials that are recyclable. We will
18 recycle and salvage construction by-products.
19 We will generate less harmful products during
20 the building's life, and we will implement
21 maintenance and operational procedures that are
22 environmentally friendly.

23 Some of the design features that we
24 have considered include site planning and
25 building orientation that maximizes solar

1 utilization and daylight; use of light-colored
2 interior surfaces to reflect daylight and
3 brighten up spaces; energy efficient lighting
4 and lighting controls; use of green materials;
5 storm water design that does not adversely
6 impact surrounding ecosystems; and energy
7 efficient building envelopes that incorporate
8 design features such as high R-value roof and
9 wall construction, high performance window glass
10 and glazing, and minimal air infiltration.

11 Our architects are helping us to look
12 at building materials and their environmental
13 and economic advantages. We are looking and
14 considering items such as terrazzo and linoleum
15 flooring, locally supplied masonry and steel
16 products to reduce transportation costs,
17 recycled block and concrete products, and high
18 reflective ceiling tile.

19 In terms of water conservation, we are
20 considering designing such features as low flow
21 fixtures, metering faucets, and circulating hot
22 water systems.

23 For waste reduction and recycling, we
24 are looking at a waste management plan to
25 recycle the packing and building materials

1 during construction and allocating space for
2 recycling during operation of the buildings.

3 One of the key areas we are looking at
4 involves the use of energy efficient heating,
5 air conditioning, and ventilating systems. In
6 terms of system designs, we are looking at
7 features such as variable speed heating and
8 cooling motors, high efficiency motors and
9 pumps, high efficiency energy filtration in the
10 main handlers, ductwork with interiors designed
11 to reduce energy loss as well as minimize noise,
12 digitally controlled energy management systems,
13 occupancy sensors, and other design optimizing
14 elements.

15 One of the most exciting design
16 features in our two new buildings is the use of
17 geothermal heating, ventilating, and air
18 conditioning systems instead of the traditional
19 boilers and chillers. Geothermal systems, as
20 many of you know, utilize a deep underground
21 system of piping with heat pumps in the
22 building.

23 Describing this system in a very simple
24 form that makes sense to me is that during warm
25 weather in the cooling mode, heat pumps extract

1 heat from the building and pipe it to the
2 underground network where it is transferred into
3 the ground.

4 In cold weather, in the heating mode,
5 the system extracts heat from the underground
6 piping and transfers it to the heat pumps in the
7 building and then the heat flows into the rooms.

8 Among the many advantages of this
9 geothermal system, basically it uses less energy
10 so that it doesn't rely on a central chiller
11 whose failure would impact the entire building,
12 provides better humidity control, requires a
13 much smaller mechanical room, can provide both
14 heating and cooling simultaneously, is less
15 noisy and much smaller duct work.

16 Our architects estimate that the
17 initial costs to use these geothermal systems at
18 the new Highland and Overlook schools would be
19 about \$120 thousand more than a traditional
20 system.

21 Yearly maintenance costs of geothermal
22 systems are estimated to be about \$5,000 less
23 than a traditional boiler/chiller system. But
24 the real savings is in the impact of the energy
25 cost. In addition to these maintenance costs,

1 we believe we will save 18 to 19 thousand
2 dollars per year per building.

3 So you see, after about five to five
4 and a half years, the additional system costs
5 are paid back and then we start to save about
6 \$20,000 per year as a function of these energy
7 reducing maintenance systems.

8 We are extremely excited about our two
9 new green schools. We're excited both in
10 concept and getting the job done. We are
11 excited about the comfort, the energy efficiency
12 and the environmental impact, but we are very
13 excited about the message that these design
14 features send to our children and our community
15 at large.

16 We really know that these schools will
17 truly showcase what environmental conservation
18 is all about and how to manage resources.

19 I thank you very much for your time and
20 interest.

21 REPRESENTATIVE BARD: Thank you very
22 much. We appreciate your testimony.

23 Are there any questions for Dr. Sichel?

24 REPRESENTATIVE THOMAS: Yes.

25 REPRESENTATIVE BARD: Representative

1 Thomas.

2 REPRESENTATIVE THOMAS: Thank you,
3 Madam Chair. I am excited about your testimony
4 and I am excited about the great strides which
5 you have made. What I have a greater concern
6 with is have we looked at a way in which your
7 progress and your methodology for moving
8 conservation forward has been shared with the
9 other counties in southeastern Pennsylvania or
10 counties in the other parts of the Commonwealth?

11 I think that there's stellar progress
12 being made in some very significant areas in
13 Pennsylvania, especially with conservation. And
14 I would just like to see more school districts,
15 especially at our region, have access to that
16 information and access to that challenge.

17 Has there been any effort to try to
18 maximize what you are doing here?

19 DR. SICHEL: In terms of responding to
20 that, fortunately for the administration at the
21 Abington School District, in this community
22 March of this past year, our board of school
23 directors approved this plan.

24 So we are going to go forward and we
25 are very excited about it. We anticipate that

1 the doors to both of these schools will open
2 somewhere around two years from September, or
3 September of 2005.

4 So I think there's a couple of things
5 that we can do in the meantime because two years
6 is a long time. As we move through the bidding,
7 awarding and building process, we are very
8 willing to share information with not only this
9 area but any other Pennsylvanians that would be
10 interested.

11 And they could very easily contact my
12 office, and I can put them in touch with both
13 our construction team and our consultants from
14 our architectural and engineering firm who have
15 done it.

16 We're very excited about it, because I
17 think what is most important is the school that
18 just opened one year ago and was worked on four
19 years prior, we couldn't afford to do it. It
20 was just cost prohibitive, and we are very
21 confident that the taxpayers of Abington will
22 see a reduction in cost as well as much more
23 environmentally friendly buildings as this.

24 So any way that we can work with people
25 to move these concepts forward, we are very

1 willing to do that.

2 REPRESENTATIVE THOMAS: I want to thank
3 Chairlady Bard for her leadership. And maybe as
4 a follow-up on 120, 125 and this issue, maybe at
5 some point we can, all of us can, look at maybe
6 some kind of regional conservation symposium and
7 maybe we bring school districts together or
8 bring other state holders together to share not
9 only this information, but there might be
10 something going on in Delaware/Chester County
11 that the Abington School District might be aware
12 of.

13 So as a follow-up to this, because I
14 think this is good healthy discussion and it is
15 imperative that we take this discussion and get
16 it out to as many state holders as possible.

17 REPRESENTATIVE BARD: Thank you very
18 much, Representative Thomas.

19 Representative Leach.

20 REPRESENTATIVE LEACH: Thank you, Madam
21 Chair.

22 I am also excited about your testimony.
23 What I have been trying to think about while you
24 were testifying is, you know, I mean the
25 Secretary testified that there are five schools

1 that are lead certified currently and 37, I
2 guess, with applications pending.

3 I understand that in the past it's been
4 difficult, you know, or this is an evolving
5 situation and it makes sense that a lot of
6 schools have not done that previously.

7 I am not sure I understand why all
8 schools aren't built like this now going
9 forward. Maybe there are very good reasons.

10 One of the reasons would be that it is
11 prohibitively expensive. But what I hear you
12 saying is that it is no longer prohibitively
13 expensive to build schools like this. In fact,
14 it might even -- did you say it would be less
15 expensive?

16 DR. SICHEL: After five years.

17 REPRESENTATIVE LEACH: In other words,
18 the savings after five years would pay for some
19 initial increased costs?

20 DR. SICHEL: The \$120 thousand that we
21 estimate to be the cost for the building of
22 these geothermal systems will be paid back after
23 five years. And then assuming energy costs are
24 static or the same, which is very difficult to
25 project, we believe it will be about a \$20,000

1 saving per building or \$40,000.

2 REPRESENTATIVE LEACH: Then it seems to
3 me that -- I mean, one idea might be, just as a
4 rhetorical statement, is that, you know, it may
5 be worthwhile for the state to -- I mean,
6 because some school districts can't afford the
7 up front costs, I would imagine.

8 It may be worthwhile for the state to
9 invest in some sort of loan program for the
10 excess cost to be repaid by the savings over the
11 cost of the number of years, over the span of a
12 number of years.

13 It seems like that would be a win-win
14 for the taxpayers, the school districts, it
15 would be good for everybody. Other than the
16 expense, is there any other reason that all
17 schools aren't built like this? Does it take
18 longer to build?

19 DR. SICHEL: I would really have to
20 defer to the architects in the room to answer
21 those questions. What I can share with you and
22 I think what is most compelling about my
23 testimony is the building we just opened a year
24 ago, we couldn't make it happen because we could
25 not bring the costs in as compared to

1 traditional prices. It didn't mean we didn't
2 want to. But we just felt that that building
3 was approximately \$24 million, and that was
4 enough to spend at the time.

5 When our architectural and engineering
6 team were able to make some significant
7 differences -- and Mr. Knouse is available in
8 the room so if you have some specificity for
9 him, I'm sure he would address it. What he has
10 shared with us is the number of contractors
11 locally that are capable of building geothermal
12 systems now exist, where four or five years ago
13 they were not as local and able to bid upon it
14 for us.

15 So if you would like to address that to
16 him, I would be happy to introduce him to you.

17 REPRESENTATIVE LEACH: I will leave
18 that to the discretion of the Chair.

19 I just have one more statement which is
20 that it strikes me as another impediment with
21 the cost issue is Act 34.

22 DR. SICHEL: Uh-huh.

23 REPRESENTATIVE LEACH: And I have
24 actually introduced legislation regarding Act
25 34, but it doesn't address this and maybe this

1 would be worth considering that this -- the
2 costs of this be taken into consideration when
3 assessing the Act 34 formula that would trigger
4 a referendum.

5 DR. SICHEL: Right. And we did this
6 without a referendum. We made sure that our
7 building costs were within the Act 34 guidelines
8 so we were able to do it.

9 REPRESENTATIVE LEACH: I'm sorry. If I
10 have anything else, I will talk to you
11 privately.

12 Thank you, Madam Chairman.

13 REPRESENTATIVE BARD: Thank you,
14 Dr. Sichel, very much for your testimony. I'm
15 sorry that we're going to have to move along
16 here.

17 We are running a little bit behind
18 schedule. And I would ask Mr. John Boecker of
19 C.R. Campbell Architects to proceed with his
20 topic.

21 MR. BOECKER: I am certainly very happy
22 to be here today. My name is John Boecker, an
23 architect with C.R. Campbell and Associates.
24 The focus of my practice for the past seven
25 years exclusively has been on the design of high

1 performance green buildings.

2 Representative Leach, I can answer some
3 of your questions, mainly because I was the
4 designer of both of the elementary schools that
5 Secretary McGinty refers to in her testimony, as
6 well as the DEP building at Cambria that is
7 consuming currently a little more than 50
8 percent less than energy of a conventional
9 building.

10 This is kind of surprising because it
11 shows up all over the place. I was out at the
12 tables today and there it is, on the cover of
13 this magazine. I had no idea. It just keeps
14 showing up all over.

15 Anyway, one other piece of
16 qualification is that I am a member of the U.S.
17 Green Building Council. In fact, I sit -- I am
18 one of 13 members in the country that sits on
19 the Lead Steering Committee for Version 3.0. I
20 am heavily involved in the development of the
21 lead process and the credits that are lead.

22 So what I am primarily here to talk
23 about is, in fact, lead, because I think there
24 is largely a misconception of what lead is. It
25 was designed specifically for the purpose of

1 establishing a measurement tool by a third-party
2 entity, by which the profession of design and
3 construction could assess the degree to which,
4 in fact, one could lay claim to doing a green
5 building.

6 The reason for that very specifically
7 was to establish validity. Because if there
8 were buildings that were laying claim to being
9 green buildings but their performance wasn't
10 that which was being claimed, then the validity
11 of the whole approach could be significantly
12 prajoritized (phonetic), which is precisely what
13 the U.S. Green Building Council didn't want to
14 have happen.

15 So prior to its existence -- and it was
16 published in March of 2000, as part of the
17 answer to your question why there aren't more of
18 these projects -- it took about a year for the
19 market to even realize that lead existed.
20 Typical school takes at least two years, a year
21 in design and a year in construction. Lead
22 cannot be achieved until construction is
23 complete.

24 So right now there are no lead
25 certified buildings in the Commonwealth of

1 Pennsylvania. There is only one lead certified
2 building in the country, and that happens to be
3 in North Carolina.

4 There are currently 37 K-through-12
5 schools that are registered for lead
6 certification. Of those, I know of four that
7 happen to exist in Pennsylvania. The Clearview
8 Elementary School, which should probably achieve
9 a lead gold level certification, was opened in
10 December of this past year.

11 I invite all of you to go visit it and
12 speak with the superintendent and the principal
13 of that school. She's claiming already that
14 there are performance improvements on the part
15 of the students.

16 That building is in terms of energy
17 modeling wise predicted to consume 56 percent
18 less energy than conventional construction. It
19 cost precisely 2 percent more than the average
20 cost of all elementary schools constructed in
21 the Commonwealth in the same year, which means
22 that roughly half of the schools cost more.

23 And I would also challenge myself to
24 try and assess the degree to which those costs
25 are attributable to green issues. I'm not

1 convinced they are.

2 On the other hand, the building will,
3 even if they were, save \$34,000 a year as
4 predicted by our energy modeling and operating
5 costs, which means that within the first four
6 years of operations, that \$34,000 would then
7 become available to do things such as hire
8 additional faculty to reduce the number of
9 students in the classrooms.

10 All this is really meant to say that
11 the lead green building rating system is the --
12 at least in our country right now is the only
13 third-party system by which folks can assess a
14 green building. And it was entirely done by
15 volunteers.

16 I am a volunteer with the U.S. Green
17 Building Council. It is a consensus document
18 that has been put together over the last about 7
19 years with participation of hundreds of experts
20 around the country.

21 One last point about lead is there are
22 graduating, let's call it, levels of
23 achievement. There are 69 possible points you
24 can achieve. You get to, as a team such as
25 Abington, choose which credits they want to

1 pursue. Some may not even be applicable to your
2 project.

3 If one achieves 26 of the 69 possible
4 points, one achieves certification. If that
5 number jumps to 33, one can achieve silver level
6 certification, at 39 gold, and at 51 platinum.

7 There are currently only two platinum
8 lead certified projects in the country, one in
9 California, one in Maryland.

10 Pennsylvania has, by the way, second
11 only to California, more registered projects
12 that are -- lead registered means that you have
13 registered your intent with the Council to
14 pursue registration -- second only to California
15 in terms of number of projects.

16 And if one, in fact, wants to
17 potentially achieve a higher level in lead,
18 there are at times additional costs, which means
19 that one of the things that 125 may want to
20 consider is a graduated increase in, let's call
21 it, reimbursement capability for higher
22 achievement in terms of the value of cost
23 savings as well as performance of these schools
24 in terms of what lead accreditation -- of what
25 lead credits they have pursued and achieved.

1 Lastly, I think the last point I really
2 want to make is I think that we have copious
3 evidence now to support. And I think only
4 within the past four years that one can
5 construct a high performance green school and
6 any other high performance green building for
7 that matter within the realm of conventional
8 construction costs via only one methodology, and
9 that is called integrated design, which would
10 take me about an hour to describe so I won't.

11 On the other hand, what that means is
12 if you want to achieve first cost equity with
13 conventional construction, it requires more
14 effort and professional services up front.

15 Things like energy modeling, which is a
16 tool for making decisions about thermal envelope
17 windows; orientation; equipment; efficiencies;
18 things like commissioning, which ensures that
19 your building will operate to spec as designed
20 and as constructed accordingly; daylight
21 modeling, which can predict the amount of
22 daylight that will allow for our electrical
23 energy to be reduced as well as potentially
24 improved performance, as the California studies
25 have shown us.

1 So I think that really the additional
2 costs are almost more in the realm of soft costs
3 than they are in terms of hard costs,
4 particularly as the technologies which are far
5 less complex than one might think, the cost of
6 those as the superintendent has explained are
7 decreasing as demand increases.

8 So one of the things that I think House
9 Bill 125 is helping support is a very old adage.
10 That is, a job well planned is a job half
11 completed. And that is really what this is
12 about, is expending the energy up front, the
13 mental and intellectual energy, to achieve the
14 performance after construction.

15 So it is really focusing on design,
16 making decisions differently. And the reason
17 that hasn't happened in my opinion is that the
18 education of this type of pursuit has only
19 within the past few years, primarily led by the
20 U.S. Green Building Council, been proliferated
21 to the extent that it is now accessible by, I
22 would say, most design professionals.

23 Lastly, 3 percent of all commercial
24 construction in the United States right now,
25 which is represented by about 88 million square

1 feet, has registered their intent to pursue lead
2 certification, which is the threshold at which
3 most market analysts assess being that threshold
4 whereby market penetration has been achieved.

5 Thank you for allowing me to probably
6 ramble a little bit longer than I should have.

7 REPRESENTATIVE BARD: Thank you very
8 much. Are there any questions for Mr. Boecker?

9 (NO RESPONSE.)

10 REPRESENTATIVE BARD: Thank you.

11 Our next presenter will be Michael
12 Andre from the Lower Marion School District.
13 Thank you for joining us.

14 MR. ANDRE: Thank you. I am the
15 Supervisor of Transportation for Lower Marion
16 School District, and I speak to you today as an
17 individual whose experience operating a large
18 fleet of compressed natural gas school buses,
19 CNG commonly called, has given him a unique
20 perspective on alternative fuels.

21 I speak not as an expert in energy
22 policy but rather as a fleet manager who has
23 spent many years up close and personal with
24 alternative fuels.

25 Since the purchase of our first CNG

1 school bus in October 1995, the district has
2 continued to replace diesel school buses with
3 CNG school buses as older diesel buses reach
4 their scheduled replacement date. As of this
5 date, the district has reached a point where 68
6 of its 108 school buses operate on CNG. That
7 number will shortly increase with the purchase
8 of four CNG mini school buses that will begin
9 operation next school year.

10 Pleased with the CNG program, which was
11 originally limited to school buses, the district
12 has expanded the program to include maintenance
13 vehicles and currently operates two CNG work
14 vans. That number will also increase in the
15 coming years.

16 Aside from the obvious local benefits,
17 our long and successful experience has proven to
18 be a compelling demonstration of the viability
19 of alternative fuels. It has put to rest any
20 concerns about the safety and reliability of CNG
21 in school bus operations. Since our first CNG
22 school bus began operations in 1995, the fleet
23 has logged more than 4.5 million miles during
24 which time we have displaced more than 900,000
25 gallons of diesel fuel.

1 By any standard, we believe this to be
2 an impressive accomplishment. Not once in those
3 almost eight years of operation has there been
4 any safety related incidents nor has our daily
5 mission ever been comprised because of a failure
6 of the buses to perform as expected. The sum
7 total of our experience is that CNG school buses
8 are safe, reliable, economical, clean, quiet and
9 a more appropriate vehicle for the
10 transportation of our school children.

11 There are approximately 20,000 school
12 buses in the Commonwealth traveling 364 million
13 miles annually. Using a conservative estimate
14 of 12 miles per gallon, the Commonwealth's
15 school bus fleet annually consumes more than 30
16 million gallons of fuel, mostly diesel.

17 Converting a mere 10 percent of the
18 fleet or 2,000 vehicles could displace 3 million
19 gallons of diesel annually. We do not consider
20 this to be an unattainable goal.

21 There are 501 school districts in the
22 Commonwealth. If we were to convert
23 approximately 30 suburban districts adjacent to
24 our major metropolitan areas, we would likely
25 meet that goal.

1 If local districts were to form
2 partnerships with local municipalities by
3 sharing infrastructure, the benefits would be
4 multiplied. Unfortunately, the biggest barrier
5 to other school districts following our lead is
6 money.

7 There is no escaping the fact that the
8 initial investment in the CNG fueling
9 infrastructure and vehicles can be significant.
10 In an environment where local districts are
11 struggling to finance education, it is
12 inevitable that school transportation becomes a
13 low priority.

14 We support the provisions of House
15 Bills 120 and 125 because they would provide
16 much needed financial assistance to school
17 districts that may be predisposed to alternative
18 fuels but lack the means.

19 The legislation would provide vital
20 financial assistance with the expense of
21 installing fueling infrastructure and vehicle
22 acquisitions.

23 The legislation also changes the
24 existing pupil transportation reimbursement
25 formula to provide increased reimbursement for

1 school buses using alternative fuels, and that
2 will be paid incrementally over the life of the
3 vehicle.

4 Without these incentives, it is
5 unlikely many districts will take the initiative
6 regardless of their interest in alternative
7 fuels.

8 There has been much discussion and
9 debate lately of the negative effects of diesel
10 fumes on the health of young children. We
11 believe the concern is genuine and that many
12 communities are predisposed to using cleaner
13 fuels; however, the financial obstacles are
14 significant and we must find a way to eliminate
15 this last remaining barrier.

16 In closing, we suggest there be prudent
17 public policy to diversify our fuel sources in
18 the transportation sector beginning with the
19 public sector of which school buses are a large
20 part. Thank you.

21 REPRESENTATIVE BARD: Thank you very
22 much. We recognize the wonderful leadership
23 that you provided in this area.

24 Thank you for documenting all of the
25 benefits that have accrued through this

1 undertaking, and we appreciate your efforts on
2 behalf of communicating that experience to the
3 rest of the state.

4 Are there any questions?

5 REPRESENTATIVE McILHINNEY: Is there
6 any theoretical reason why you couldn't -- could
7 you actually get to 100 percent or is there a
8 reason that, weather or something, that you
9 would always want to have a reserve of diesel
10 vehicles?

11 MR. ANDRE: The only thing that would
12 prevent me from going 100 percent at this point
13 is the lack of fueling infrastructure outside of
14 our immediate area of operation.

15 We often have to take school trips.

16 REPRESENTATIVE McILHINNEY: Like to
17 Harrisburg.

18 MR. ANDRE: Well, we can at this point
19 go to Harrisburg and back. For instance, I had
20 to do a recent trip out to Altoona.

21 Theoretically, I could do it with the
22 CNG school bus, but I would have to do a lot of
23 preplanning and a lot of jiggling and jogging
24 from station to station. So as a practical
25 matter, I would -- under the existing

1 conditions, I would always retain some diesel
2 buses for those types of situations.

3 REPRESENTATIVE McILHINNEY: Thank you.

4 REPRESENTATIVE BARD: Representative
5 Leach.

6 REPRESENTATIVE LEACH: I don't have a
7 question. I would just say that Mr. Andre is
8 from Lower Marion, which Lower Marion High
9 School is in the 149th District, where all good
10 ideas are born. Thank you for being here.

11 REPRESENTATIVE BARD: All right. Our
12 next presenter is Joe Biluck who represents the
13 Medford, New Jersey School District. He has a
14 lot of very interesting experiences to share
15 with us.

16 MR. BILUCK: Thank you, Congressman
17 Bard. And I would first like to thank obviously
18 Congressman Bard and the rest of the committee
19 for inviting me here today to share my
20 experience that we've amassed at Medford
21 Township Schools in the use of biodiesel over
22 the last five years.

23 I am Director of Operations and
24 Technology from Medford Township Schools. We
25 are a suburban community in South Jersey,

1 possibly 30 minutes from Philadelphia. Our area
2 covers approximately 42 square miles. We
3 transport on a daily basis a little over 3200
4 kids to and from school.

5 The reason we got involved in
6 alternative fuels to begin with was to amass
7 some real world experience with an alternative
8 technology should we find ourselves faced with
9 mandates that would come from either the state
10 level or the federal level to incorporate
11 alternative fuel technologies within our
12 operations.

13 Not wanting to be a reactive situation,
14 I wanted to be proactive in gaining this
15 information, this knowledge, and pardon myself
16 with state agencies who would provide the
17 hopefully economic assistance to introduce
18 alternative fuels into our operation.

19 As you know, school districts face
20 difficult financial decisions, and ultimately
21 the decisions tend to favor instruction rather
22 than operation. They tend to favor budgetary
23 constraints that would allow operating costs and
24 annual expenses to be more in favor than capital
25 outlet. So ultimately capital expenditures tend

1 to take a backseat when budgets are being
2 developed.

3 Currently, this year in the state of
4 New Jersey, we find ourselves being supported by
5 the state at 14 percent levels, not -- ten years
6 ago we were supported by the state in the
7 neighborhood of 48 percent, 50 percent.

8 So we see a drastic decline in the
9 assistance that we are seeing on the state
10 levels, which ultimately those funds need to go
11 into and funneled into instruction. I don't
12 envy the position of superintendents and
13 policymakers. They have a very, very difficult
14 situation to make these decisions.

15 The use of alternative fuels has a
16 viable or is a viable component in any
17 operation. And being partnered with state
18 agencies I think is critical in introducing
19 alternative fuels. In our particular
20 circumstances, we introduced biodiesel in 1997.

21 The reason we went to biodiesel is in
22 the state of New Jersey, the Administrative Code
23 expressly prohibits any fuel other than gasoline
24 or diesel in student transportation.

25 So I would encourage the committee to

1 incorporate language into any legislation that
2 would allow school districts to take a look at
3 and to have various options available to them,
4 not only so much in infrastructure support, but
5 also into incremental costs and into introducing
6 alternative fuels into existing operations.

7 One of my concerns is -- or at the time
8 when introducing alternative fuels is to have a
9 way out. Biodiesel is essentially a pour-and-go
10 technology. If that technology was not
11 successful, I could abandon it at any point. I
12 did not incur any capital expenses, increased
13 capital expenses, when we introduced biodiesel
14 into the fleet.

15 The educational component was very low.
16 I didn't have to retrain my technicians. I
17 didn't have to retrain my drivers. I didn't
18 have to modify the engines.

19 Essentially, what I had to worry about
20 was the incremental cost of the fuel and
21 economics driving a number of decisions that
22 school districts have to make. And I didn't
23 want to have the added expense of introducing
24 alternative fuels to be borne by the community.

25 I wanted to make sure that we had a

1 strong partnership, a long-term partnership with
2 the state and to be able to demonstrate the fact
3 that alternative fuels does have a place in
4 student transportation.

5 I believe that school districts and
6 student transportation and alternative fuels are
7 an excellent fit, only because we are
8 transporting and we are housing our most
9 precious commodities, that which is our children
10 and our future. And we have to ensure that
11 their health and safety is of paramount
12 importance.

13 One quick story I would like to share
14 is that we transport a fair amount of
15 handicapped students in our day-to-day
16 operations. And when I introduced alternative
17 fuels, biodiesel, into our operations, one of
18 the drivers came back to me with a story who
19 transports these handicapped kids who often are
20 plagued with chronic respiratory distress.

21 In the wintertime when the buses are
22 idling and they're off-loading the students at
23 these various schools, she noticed that the
24 students don't struggle as much when they need
25 to breathe or when they are breathing or

1 off-loading on the vehicles, because essentially
2 the tailpipe is located where the children are
3 loaded and off-loaded on these vehicles.

4 And it was a very nice compliment that
5 she gave us on the operations and recognized the
6 fact that these students are actually
7 benefitting from the use of alternative fuels
8 and that's a practical application to these
9 fuels.

10 I would also urge that state
11 agencies/policymakers recognize the fact that
12 energy efficiencies, alternative fuels, they do
13 have a viable place within our operations. We
14 are finding now that fortunately for us in the
15 state of New Jersey, biodiesel is offered on our
16 state cooperative purchasing agreement. In the
17 beginning, we were paying \$1.83 a gallon for
18 biodiesel. Now we are paying slightly over
19 \$1.27 a gallon.

20 There are a number of fleets that have
21 incorporated the use of biodiesel in their
22 operations, mainly because it is available now.
23 They can use their existing infrastructure.
24 They can use their existing equipment. There
25 are no trade-in penalties as a result of using

1 an alternative fuel. You can purchase the
2 vehicles that you have been in the past or you
3 can maintain the same operations as you have in
4 the past.

5 And you are benefitting from the fact
6 that you are reducing emissions that would have
7 a negative impact on the daily lives of these
8 students, and you are increasing the efficiency
9 of your fleet, thereby reducing dependency on
10 foreign supplies, which is a very sensitive
11 topic these days as you well know.

12 So our experience has been very, very
13 positive in the state of New Jersey. And I am
14 happy to announce that just recently, and
15 hopefully they will announce, the New Jersey
16 Board of Public Utilities is allocating over a
17 million dollars to support the introduction of
18 alternative fuels, both from an infrastructure
19 point of view and also from a fuel supplier's
20 point of view, to have a long-term partnership,
21 establish a long-term partnership, with state
22 agencies and municipalities.

23 REPRESENTATIVE BARD: Thank you very
24 much.

25 MR. BILUCK: Thank you.

1 REPRESENTATIVE BARD: I would just like
2 to clarify. The subsidy that you have received
3 in the past to pay for the extra cost of using
4 biodiesel, can you explain a little bit more
5 about how that has worked?

6 MR. BILUCK: In 1995, I partnered with
7 the state public -- Board of Public Utilities, a
8 division of energy, and I essentially
9 volunteered my fleet to be a third party
10 participant in any alternative fuel project that
11 the state may endeavor in in the future.

12 Again, one of the obstacles that we
13 found was that we couldn't incorporate any fuel
14 other than gas or diesel. So partnering with a
15 woman by the name of Ellen Borebond (phonetic),
16 who heads up the Alternative Fuels Division
17 within the State Board of Public Utilities, she
18 crafted an application to the United States
19 Department of Energy, who at that time was
20 providing funds to incorporate and to subsidize
21 alternative fuels into school bus operations.

22 And we were successful in 1996 to
23 receive \$115,000 of DOE funds to subsidize the
24 purchase of an alternative fuel tank as well as
25 the incremental costs for the biodiesel.

1 REPRESENTATIVE BARD: Thank you. Any
2 questions?

3 Representative Thomas.

4 REPRESENTATIVE THOMAS: Yes. Thank you
5 for your testimony. Quick question. Do you
6 have your testimony in written form?

7 MR. BILUCK: No, but I could certainly
8 do that for you.

9 REPRESENTATIVE THOMAS: Okay. Would
10 you submit it to the Chair, Madam Chair. I have
11 a member that would like a copy of the
12 testimony. Thank you.

13 REPRESENTATIVE BARD: Thank you very
14 much. We appreciate your being with us today.
15 Now we will move to our environmental panel and
16 lead off with Mr. Joe Wydra, Pennsylvania Clean
17 Fuels Coalition. Thank you so much for being
18 with us.

19 MR. WYDRA: Thank you, Representative
20 Bard and committee members. I think some of you
21 know that given the opportunity, I could go all
22 afternoon with some of these exciting stories.
23 If you indulge me, I will stick to my script
24 which is only about four and a half minutes and
25 then we'll throw it open for questions.

1 Good afternoon, Representative Bard and
2 members of the House Environmental Resources and
3 Energy Committee. I thank you for this
4 opportunity to support energy independence and
5 clean fuels.

6 I want to especially thank
7 Representative Bard for hosting this event and
8 for her continued support of our mutual goals of
9 energy independence and a cleaner environment.
10 I also want to express my appreciation to
11 Secretary McGinty for her support and
12 leadership.

13 We are truly closer than ever to market
14 commercialization. And I think that's the key
15 word, market commercialization of these new
16 fuels and technologies.

17 I am here today on behalf of the
18 members of the Pennsylvania Clean Fuels
19 Coalition. We are fuel and technology neutral
20 and support the work of the Task Force on 21st
21 Century Energy Policy for Pennsylvania, because
22 each proposal adds one more block to the
23 foundation toward building our energy
24 independence.

25 While we are an informal group, we are

1 all long-time players committed to actual
2 projects that, as we say, will get gallons
3 flowing and wheels rolling. These projects are
4 being driven by producers and distributors of
5 alternative fuels, the manufacturers of engines
6 that can utilize alternatives fuels, the fueling
7 facilities and the ultimate end users of the
8 fuels.

9 Our motivations are energy independence
10 and a cleaner environment. But paramount to our
11 goals are Pennsylvania jobs and economic
12 development. Today we have the fuels,
13 technology, vision and knowhow to make
14 Pennsylvania truly the Keystone Clean Energy
15 State.

16 For many years, we have worked on the
17 verge of commercialization of these alternative
18 fuels and the industry. We strongly support the
19 financial incentives in House Bills 120 and 125,
20 which we believe will prime the pump for
21 successfully deploying a viable alternative
22 fuels industry in the Commonwealth.

23 As you are aware, these bills are the
24 result of Representative Bard's Task Force and
25 its work. These bills will help establish

1 production of alternative fuels, fueling
2 facilities and a clean fuel industry in
3 Pennsylvania. I think this is the key statement
4 in my whole -- in all of my testimony.

5 In short, we will solve our classic
6 chicken and egg -- or as we are here today,
7 cost -- dilemma by helping to establish the
8 foundations for funding for the production,
9 distribution and use of the fuels.

10 Another way of saying that is the
11 grants and incentives programs in the bills help
12 the private side with their private funding, in
13 their pro formas and in their reference to go to
14 Wall Street or banks or other financial
15 institutions. Seeing some money on the books
16 from the state side helps with
17 commercialization.

18 I want to briefly highlight just two of
19 the projects we've been working on. The
20 Pennsylvania Alternative Fueled Heavy Duty Motor
21 Carrier Demonstration project; we are working
22 with energy suppliers, fuel distributors,
23 fueling facility manufacturers, motor carriers,
24 the Pittsburgh and Philadelphia Clean Cities
25 Programs and the Department of Environmental

1 Protection to establish a Demonstration Project
2 to build two public access fueling facilities
3 and to convert 50 heavy duty motor carrier
4 trucks to run on alternative fuels. If you can
5 finalize the financing soon, and we are very
6 close, we believe that we can have the wheels
7 rolling this year or early in 2004. Some of
8 that would depend on the construction season.

9 WMPI, Ultra Clean Fuels, these are the
10 two projects I want to highlight. Schuylkill
11 County developer John W. Rich, Jr. hosted a
12 visit by Representative Bard's Task Force last
13 spring to his coal waste processing and
14 cogeneration plant in Schuylkill County.

15 If you drive up 81, when you get to
16 Frackville and you look left and you see the
17 cooling towers, that is the area I am talking
18 about.

19 Mr. Rich's project to convert coal
20 waste -- I am not talking about mining new coal.
21 I am talking about the stuff that's on the
22 ground everywhere in northeastern Pennsylvania
23 and western Pennsylvania and southwestern
24 Pennsylvania.

25 To convert the coal waste into a

1 zero-sulfur transportation fuel, it is the first
2 of its kind in the nation and a textbook example
3 of turning a waste into a beneficial use. We
4 will be reclaiming now barren countryside and
5 providing our transportation industry a clean
6 domestic fuel.

7 The Ultra Clean Fuel's Project is in
8 the final stages of completion of a financing
9 agreement and in the very, very late stages of
10 final design, and we expect to break ground by
11 the end of this year or early in 2004.

12 The Heavy Duty Motor Carrier
13 Demonstration Project brings together quality
14 private partners such as Caterpillar, Giant
15 Eagle, J.P. Donmoyer, Inc., Clean Air Partners,
16 Clean Cities and the DEP.

17 Mr. Rich's Ultra Clean Fuels Project is
18 supported by President Bush, Energy Secretary
19 Abraham, the Departments of Energy and Defense,
20 the Environmental Protection Agency, state and
21 federal lawmakers, the Pennsylvania AFL-CIO and
22 the Building and Construction Trades Council of
23 Pennsylvania. Those are just a few of the
24 people who support.

25 Both projects protect Pennsylvania jobs

1 by ensuring competitive choice and reliability
2 of clean, domestic fuels, thus reducing our
3 over-reliance on foreign oil imports. Ensuring
4 the transportation and distribution of
5 Pennsylvania products and commerce ensures
6 Pennsylvania jobs.

7 One of the products that Donmoyers
8 moves from Lebanon County every day of the year
9 for water and sewer plants is Pennsylvania
10 limestone. There's lots of limestone in
11 Pennsylvania, but there's also lots of limestone
12 elsewhere as well. If getting it there helps
13 Donmoyers be a little more competitive in that
14 process, this is one more reason for having all
15 those jobs in central Pennsylvania.

16 This is important, too. Mr. Rich's
17 project will employ 1200 construction jobs in
18 Schuylkill County, the Frackville area. Those
19 are 1200 construction jobs for two years or so
20 that it will take to build the plant, and then
21 we will add on-site 150 new permanent jobs and
22 at least 600 spin-off jobs relating to the
23 supporting industry.

24 Mr. Rich's project more importantly
25 will remove thousands of acres of waste coal

1 piles, end sources of acid mine runoff and
2 reclaim many gray fields for productive and
3 recreational uses.

4 The vision for these projects has been
5 around for many years. Representative Bard's
6 Task Force work and resulting legislation
7 combined with the development of the technology,
8 availability and demand for the fuels, clean air
9 and environmental policy and the current
10 international situation have come together to
11 have us very close to critical mass.

12 Some still question the costs or where
13 the funding should come from. Recently, Barry
14 Worthington, who's the President of the United
15 States Energy Association -- this was just in
16 the last few weeks -- was on television and made
17 this comment, and this is just an excerpt --
18 every day in this country we spend 25 to 30
19 million dollars on Iraqi oil, that is a day --
20 at that rate we could pay for both the projects
21 that I've described in just a matter of weeks.

22 We can continue with the status quo if
23 we want to continue our dependency on foreign
24 oil imports. But by doing so, we will continue
25 to export our jobs and the prosperity related to

1 our energy dollars.

2 Most importantly, the environmental
3 benefits of making Pennsylvania a leader in the
4 successful deployment and use of alternative
5 fuels are immeasurable. You've heard about the
6 benefits of the school vehicles. However, let
7 me give you just a few more examples.

8 One heavy duty motor carrier engine
9 running on a natural gas engine can displace the
10 emissions of 65 cars, and that's a conservative
11 ratio. The same fuel and technology can also be
12 used to provide our children cleaner air to
13 breathe each day on their ride to school. We've
14 heard about that already.

15 Given the Federal Clean Air mandates
16 imposed upon Pennsylvania, the expanded use of
17 alternative fuels can have a significant impact
18 on the ways Pennsylvania can meet these mandates
19 without further penalties or costs imposed on
20 motor carriers and motorists.

21 Widespread use of alternative fuels
22 could, in fact, result in dual green benefits of
23 not just clean air, but also the accrual of
24 Clean Air Act credits to benefit economic growth
25 and development in Pennsylvania. Without clean

1 credits, economic development comes to a halt.

2 So that's a program, and I note
3 Secretary McGinty has mentioned that proposal
4 several times in the last few weeks.

5 By utilizing proven technologies to
6 convert Schuylkill County coal waste -- and
7 again, I will stress it is coal waste -- to
8 clean transportation fuels, the Commonwealth
9 will, according to economic estimates, avoid
10 spending about \$2.8 million annually or about
11 \$55 million over the 20-year life of the
12 environmental reclamation projects. That
13 represents 55 million over 20 years that could
14 be spent somewhere else.

15 The practical clean air benefits from
16 the use of alternative fuels by Pennsylvania's
17 motor carriers and motorists can be immense.
18 For example, the coal to diesel project will
19 produce a zero-sulfur diesel fuel that can be
20 immediately blended into the existing diesel
21 infrastructure and engines, without need for any
22 changes in the engine specifications. It can
23 happen today.

24 It will provide a fuel that is
25 virtually sulfur free, low in aromatics and

1 particulates -- you heard about particulates
2 already -- resulting in a fuel that will not
3 only reduce pollution but will also have a high
4 cetane rating and energy output.

5 Just as a quick aside, many of you may
6 know that BARTA in Reading has been running
7 their buses on CNG since 1992. And Roger Penske
8 himself of Detroit Diesel intervened on the
9 development of the engines. The natural gas
10 they run those buses on has about 130 octane,
11 which is probably at least 30 octane more than
12 the normal engine is used to running on.

13 One of the problems they had was that
14 they had to actually slow the engines down.
15 They didn't want the buses peeling out at bus
16 stops. That's how quick the engines became.

17 And then I also want to further note
18 that the Lower Marion School District's natural
19 bus program not only solved community air
20 concerns, which we all heard about, but it also
21 provided the children fresh air on their way to
22 school.

23 In conclusion, the Pennsylvania Clean
24 Fuels Coalition believes the Commonwealth is on
25 the leading edge of successful development and

1 deployment of a viable alternative fuels
2 industry in the Commonwealth.

3 Such an industry will include
4 alternative fuel producers, engine
5 manufacturers, infrastructure development
6 partners and end users.

7 Such an effort will provide substantial
8 economic and environment benefits to all
9 Pennsylvanians.

10 We believe House Bills 120 and 125 will
11 hasten the success of alternative fuels in
12 Pennsylvania. We have been believers in the
13 vision for alternative fuels for a long time and
14 remain committed to working with you and the
15 administration toward achieving our mutual goal;
16 a successful and robust alternative fuels
17 industry that will benefit all Pennsylvanians.

18 REPRESENTATIVE BARD: Thank you very
19 much.

20 MR. WYDRA: Thank you.

21 REPRESENTATIVE BARD: Are there any
22 questions?

23 REPRESENTATIVE LEACH: Not a question.
24 I just want to thank you and apologize. I have
25 a meeting at my district I have to go to. I

1 have learned an awful lot today.

2 I compliment Representative Bard. She
3 did a terrific job in hosting this. And I look
4 forward to reading the testimony that the rest
5 of the people are going to provide, which I
6 promise you I will do. And, you know, thank you
7 again for everything.

8 REPRESENTATIVE BARD: Thank you.

9 I would just like to ask if you could
10 make a comment or if there's a position of the
11 Clean Fuels Coalition with regard to House Bill
12 120 and the suggestion that this legislation be
13 taken out of the -- the current AFIG program be
14 taken out of the Transportation Code and made
15 amenable to inclusion of projects which would be
16 of a stationary nature.

17 MR. WYDRA: Well, that is a good idea
18 because the key to the whole thing is production
19 of fuels. That gets back to my chicken and egg
20 analogy.

21 And while these projects eventually and
22 perhaps very quickly can become commercial and
23 financially supportable, going to Wall Street or
24 going to banks with proposals like this, they
25 start scratching their heads and saying, We are

1 not really going to make any money at this.
2 What can you do to ensure that we are not going
3 to lose our investment on this? And some stake
4 from the state or their federal government helps
5 a whole lot. I think that's a good idea.

6 REPRESENTATIVE BARD: How much would
7 you think would be required for these stationary
8 projects, how much money?

9 MR. WYDRA: I think that is on an
10 individual basis. Some are a little more
11 advanced, more cutting edge in the technology
12 than others are. Some it is just a matter of
13 really finding a local bank that might be
14 willing to partner.

15 And I think in the situations where
16 it's relating to economic development, I
17 wouldn't want to put a percent or a dollar
18 amount on it. But I think in some cases the
19 percent wouldn't have to be that much.

20 REPRESENTATIVE BARD: Do you have any
21 projects that you could give us an example of
22 this sort of funding that would be required?

23 MR. WYDRA: Let me go back to one of
24 the ones that I highlighted, the heavy duty
25 motor carrier. We believe if we can get the

1 discussed AFIG, even the 50 percent -- I think
2 now we are at 20 percent. Even if we could get
3 it back to just 50 percent, these projects are
4 a go.

5 REPRESENTATIVE BARD: In terms of
6 stationary projects?

7 MR. WYDRA: The stationary -- the
8 proposed -- let me answer that question this
9 way. The production credit that's in House Bill
10 120, the moratorium on the alternative fuels tax
11 that is in House Bill 120 are already part of
12 the Ultraclean Fuels pro forma. So whatever
13 those calculations end up being -- and there's a
14 cap on the production credit already.

15 And as far as the alternative fuels tax
16 moratorium, that cost to the state doesn't
17 really kick in until you actually get gallons
18 flowing. So immediately on the moratorium for
19 the alternative fuels tax, the accountants can
20 say, well, we have some credit. I think right
21 now it is about 31 cents is what the liquid
22 fuels tax is.

23 Right now at some point in the out
24 years, we know there is a credit of 31 cents a
25 gallon out there for these fuels. And we know

1 that there's a cap -- I forget how many million
2 dollars it is. It's based on the more you
3 produce, the more you get. But I think it is a
4 cap of about 12 and a half million on any
5 individual project.

6 So in the scheme of things, we are
7 talking about 1200 jobs for two years and then
8 almost 1000 permanent jobs under the production
9 credit. We are talking maybe 12 and a half
10 million.

11 And under the moratorium, we're talking
12 for at least two or three years out no cost
13 until the fuel actually gets going, and then it
14 would depend on what the use would be. So we
15 are not talking about a whole lot of money.

16 REPRESENTATIVE BARD: Then, of course,
17 both of those examples are covered under the
18 AFIG program written in House Bill 1250 and
19 wouldn't need to be taken out of the
20 transportation bill. Okay. Thank you very
21 much.

22 Our next presenter is Eric Cheung from
23 the Greater Philadelphia Clean Cities Program.
24 Thank you so much for joining us.

25 MR. CHEUNG: Thank you, Representative

1 Bard. I printed out copies of my testimony if
2 you guys want to read it with me.

3 Is it okay if I approach?

4 Thank you again, Representative Bard,
5 for allowing me to testify, and congratulations
6 for being appointed as Chair of the Energy
7 Subcommittee.

8 Greater Philadelphia Clean Cities
9 Program -- and again, my name is Eric Cheung.
10 I'm the Coordinator of Philadelphia Clean Cities
11 Program. This organization is a coalition of
12 public and private organizations which seek to
13 advance the use and support for vehicles that
14 run on alternatives to gasoline or diesel fuel,
15 including natural gas, electricity, biofuels,
16 propane and hydrogen.

17 PECO Energy Company, Philadelphia Gas
18 Works, Clean Air Council, the City of
19 Philadelphia, Ford Motor Company, General
20 Motors, the U.S. Department of Energy,
21 Pennsylvania Department of Environmental
22 Protection, the Pennsylvania Turnpike, our
23 metropolitan planning organization, Delaware
24 Valley Regional Planning Commission, in this
25 local area Willow Grove Naval Air Force Base,

1 and of course Lower Marion School District are
2 among the active members of this coalition.

3 Philadelphia Clean Cities promotes its
4 objectives through educational outreach and by
5 administering rebates for those interested in
6 purchasing alternative fuel vehicles.

7 Philadelphia Clean Cities
8 representatives participated in Representative
9 Bard's Energy Task Force, whose deliberations
10 resulted in the package of Energy Freedom Bills
11 that includes HB 120 and HB 125. Philadelphia
12 Clean Cities recommends that HB 120 be passed
13 into law in Pennsylvania. The cost differential
14 between alternative fuel vehicles and their
15 gasoline/diesel counterparts continue to be
16 prohibitive for consumers, who normally might
17 consider purchasing cars that do not rely so
18 heavily on dirty petroleum-based fuels.

19 The differential can be anywhere from
20 \$4,000 for light duty passenger vehicles to
21 \$30,000 for buses and trucks. Now, with
22 Pennsylvania's Alternative Fuels Incentive
23 Grants, the AFIG program, currently offering to
24 fund only 20 percent of this differential cost,
25 potential buyers remain deterred from purchasing

1 any alternative vehicle, except for hybrid
2 electric vehicles, which I think that is
3 primarily where the recent success of the
4 program has been.

5 In order to spark the movement towards
6 alternative fuel vehicles, AFIG funding needs to
7 increase to 70 or even 90 percent of the
8 differential cost, which is what HB 120
9 provides.

10 Modification to AFIG rebates will also
11 help develop the infrastructure for alternative
12 fuels, the lack of which has been another
13 obstacle for potential buyers.

14 Now, while this may make it seem like
15 the Commonwealth is being asked to foot the bill
16 for the development of alternative fuels, we
17 cannot expect that the burden of transitioning
18 society away from petroleum dependency should
19 rest squarely on the shoulders of a small number
20 of progressive drivers and fuel providers, who
21 are willing to take the first steps.

22 Make no mistake, without a significant
23 increase in AFIG rebates, alternative fuel
24 vehicles will remain marginalized.

25 Philadelphia Clean Cities intimately

1 understands the need for increases in AFIG
2 awards, as it has spent the past year trying to
3 convince school districts to switch their bus
4 fleets to alternative fuels.

5 Every school day our children are
6 exposed to the harmful pollution that diesel
7 exhaust emits. This is the same pollution that
8 recent reports have found causes an increased
9 risk of developing respiratory symptoms, asthma
10 and in some cases lung cancer.

11 And while fleet managers have been
12 receptive to Philadelphia Clean Cities message,
13 the financial obstacles leave them unable to do
14 anything. In fact, during lunch I spoke with
15 the superintendent for Abington. That's
16 essentially the answer. She likes the idea, but
17 the cost is prohibitive.

18 School districts cannot be expected to
19 magically set aside an extra \$100,000 to
20 \$150,000 in their transportation budgets to pay
21 for a couple new natural gas buses and a fueling
22 station, which is what they would need to really
23 start.

24 Right now at the current levels, AFIG
25 only offers 20 percent of that cost. So that is

1 still not going to be enough for a school. I
2 mean, they are not really budgeted to take care
3 of that added expense.

4 Because HB 120 would make AFIG a more
5 effective rebate program, Philadelphia Clean
6 Cities wholeheartedly supports its adoption.
7 Likewise, Philadelphia Clean Cities supports HB
8 125 as it provides increased reimbursements for
9 school districts to use alternative fuel
10 vehicles in their bus fleets.

11 I am going to just depart momentarily
12 from my prepared remarks. I didn't realize that
13 Mike Andre and Joe Biluck were going to be
14 speaking here. There is a perfect example of
15 why we need the AFIG funding. Lower Marion and
16 Medford are great, wonderful success stories to
17 show how alternative fuel vehicles can be
18 incorporated in school districts.

19 But Clean Cities is a national program.
20 So I go to different conferences all across the
21 country and different parts of this state. And
22 they're the same success stories we keep seeing.
23 Michael Andre started -- it was in 1996 you
24 started, so that is seven years now. There
25 hasn't been anyone else who followed that lead.

1 And the same with Medford. They've been
2 successful because they have the administration
3 backing them and the parents.

4 And I believe Michael Andre has talked
5 in the past how he is getting rebates. But
6 their school district is still footing part of
7 that bill. They're paying the extra cost
8 themselves. Other school districts are not so
9 fortunate to have a wealthy source, a tax base
10 like Lower Marion does.

11 So in those cases, the money really
12 needs to be there for them, unless we want to
13 continue hauling out the same success stories
14 year after year. We need to provide other
15 sources of funding so other school districts can
16 join them as well.

17 Finally, on a cautionary note,
18 Philadelphia Clean Cities believes that
19 modifications to AFIG should not open up the
20 rebate program to projects other than
21 alternative fuel vehicles. Now, I am aware
22 there's a desire -- and I believe Secretary
23 McGinty spoke to this earlier -- there's a
24 desire, particularly in view of the state's
25 budgetary difficulties, to turn to AFIG funds

1 for other types of alternative energy projects
2 like stationary sources.

3 AFIG, however, was created specifically
4 for alternative fuel vehicles and should remain
5 that way.

6 The only reason the program accumulated
7 a sizable surplus is because the 20 percent
8 differential cost recovery it gradually offered
9 was inadequate. Stationary renewable energy
10 projects, while certainly worthwhile -- and
11 Clean Cities does not oppose them -- are much
12 more expensive than alternative fuel vehicle
13 acquisitions.

14 Philadelphia Clean Cities fears that
15 steering AFIG funding away from what it was
16 originally intended for will ultimately deplete
17 the pot of money that could be going to
18 initiatives like helping school districts clean
19 up their bus fleets.

20 Stationary sources, unlike alternative
21 fuel vehicle projects, can more readily seek
22 funding from some of Pennsylvania's various
23 sustainable development funds.

24 During the energy symposium, we had
25 Roger Clark talking about that. These are pots

1 of money that come from taxes through your
2 utility bills and that is -- they have a lot of
3 money there for stationary projects.

4 My alternative fuel vehicle projects
5 can't tap into that. So we would like to make
6 sure that we have our dedicated source of
7 funding for our projects as well. Thank you
8 very much.

9 REPRESENTATIVE BARD: Thank you very
10 much. Are there any questions?

11 (NO RESPONSE.)

12 MR. CHEUNG: Earlier you asked
13 Secretary McGinty about hybrid electric vehicles
14 availability. The domestic car companies are
15 lagging behind but they are -- Ford is going to
16 come out with either -- I think it's the Ford
17 Explorer or Escape as a hybrid version later in
18 the year, and I believe GM is doing the same.

19 I mean, that is the plus side. The
20 down side is they are not necessarily as fuel
21 efficient as the Japanese car companies are, but
22 they at least have -- they've heard of the need
23 for that. So you are going to see some domestic
24 car manufacturers coming out with new vehicles.

25 REPRESENTATIVE BARD: All right. Thank

1 you.

2 Our next presenter is Michael
3 Fiorentino from the Clean Air Council. Thank
4 you for being with us.

5 MR. FIORENTINO: Members of the
6 Committee, Chairwoman Bard, good afternoon. I
7 am Michael Fiorentino. I am the Program Manager
8 for Air Quality at Clean Air Council, and I am
9 an attorney with Clean Air Council. We are a
10 non-profit environmental organization dedicated
11 to everyone's right to breathe clean air.

12 Founded in 1967 -- pardon me. The
13 Council was founded in 1967, and our work
14 includes sustainable transportation and clean
15 energy programs in addition to our air quality
16 work.

17 I do appreciate the opportunity to
18 testify before the Committee today. And
19 specifically, Clean Air Council would like to
20 thank Chairwoman Bard for her unflagging
21 leadership and coalition-building efforts in
22 bringing important, smart energy legislation to
23 the Assembly.

24 The focus of the Council's testimony
25 today is House Bill 120 concerning the

1 Alternative Fuels Incentive Grant program.
2 Clean Air Council has long supported this AFIG
3 program, and we have been active in defending
4 AFIG from efforts to use its funding for
5 non-related purposes.

6 AFIG is a significant program because
7 we live in a state that is plagued by persistent
8 air quality problems. As much as 80 percent of
9 the population of the Commonwealth live in areas
10 that do not meet the 1997 federal health
11 standards for ozone.

12 Motor vehicles are responsible for a
13 large portion of the pollutants that make up
14 ozone. The AFIG program was developed primarily
15 as a tool to foster a transition to cleaner
16 technologies for our transportation needs so
17 that people would enjoy the health benefits of
18 improved air quality.

19 Clean Air Council supports efforts to
20 restore viability to the AFIG program and
21 believes that House Bill 120 has good potential
22 to achieve that. However, the Council strongly
23 recommends the bill be modified to address the
24 concerns reflected in the comments that I will
25 now give.

1 Subsection 7202(b)(1) and (b)(1.1)
2 appear to conflict in some ways and be
3 duplicative in some ways. For example, (b)(1)
4 addresses retrofitting of vehicles of several
5 types and the purchase of new dedicated vehicles
6 at 60 percent. And the (b)(1.1) section
7 addresses those types as well as hybrid vehicles
8 at rates of 70 percent and 90 percent. Clean
9 Air Council, of course, supports the 70 percent
10 and 90 percent ratios of incremental cost grant
11 funding.

12 Furthermore, Section (b)(1) addresses
13 the types of entities eligible to receive these
14 grants. However, Section (b)(1.1) does not. In
15 light of the need for clarity, it will be useful
16 to harmonize these two subsections, while
17 maintaining those higher percentages at Section
18 (1.1) and deleting the draw-down of the
19 percentages that exist in (b)(1). I am a
20 lawyer, so you will have to forgive me for
21 getting heavily into the subsections of the
22 bill.

23 Another thing I noted is that I would
24 recommend that the bill be stripped of a
25 reference to the Pennsylvania Energy Office if

1 it has been determined that the Department of
2 Environmental Protection is going to be the
3 manager and the entity that distributes the
4 Fund. I am not aware of the need to maintain
5 the reference to the Energy Office.

6 On another point, as currently drafted,
7 the new AFIG legislation appears to not include
8 annual reporting duties to the General Assembly.
9 Section 7203 had called for the Department to
10 report on grant activities with the Fund, but as
11 I interpret the actual text of the bill, it
12 appears to be bracketed which indicates that it
13 would be slated for removal. So I don't know if
14 that was the intention.

15 On a significant point, completely new
16 to the AFIG program under this legislation is
17 revenue generation for the AFIG Fund from
18 royalties accruing to the Oil and Gas Lease
19 Fund, as well as Alternative Fuels Production
20 Grant Program. They are in 7204.1 and 7206
21 respectively.

22 Although encouraging such development
23 in Pennsylvania has some positive features, they
24 are not necessarily in line with the grant
25 criteria of 7202(c) for improvement of air

1 quality, attainment of air quality standards,
2 and protection of the natural environment.

3 Clean Air Council contends, therefore,
4 that such fuel production grants must not be
5 allowed to supplement the existing goals of
6 AFIG, which is providing grants for alternative
7 fueled vehicles and fueling stations themselves.

8 On its own, Section 7206 would allow
9 single grantees for single fuel production
10 facilities to obtain up to approximately \$3
11 million a year for five years from the AFIG
12 fund.

13 Now, although the Council does not
14 possess exact figures at this time, it is
15 believed that the annual revenue from the
16 utility gross receipts tax, which is the source
17 for -- the primary source for the funding, is
18 not significantly more than that amount.

19 The Council does acknowledge a 10
20 percent annual limitation in Section 7202(3) and
21 submits that that limitation is critical; and
22 that is the limitation that would not allow any
23 single business corporation, school district or
24 individual to attain more than 10 percent of the
25 entire fund in a given year.

1 Yet it is still possible that the
2 traditional source of revenue for the Fund gross
3 receipts tax could be completely depleted
4 through a handful of production grants made by
5 the Department, and those would be the fuel
6 production grants primarily, which could leave
7 residential school districts, small businesses
8 and other entities out of luck on their grant
9 applications for traditional AFIG purposes.

10 Now, although the Oil and Gas Lease
11 Fund royalties are a new source of revenue, that
12 is only the case if 7204.1 makes it through the
13 legislative process and is not removed before
14 final passage. Even if that section does become
15 law, it is subject to fluctuation year to year
16 and may provide little assurance that adequate
17 funding for AFIG's primary mission would remain.

18 Council believes that although it may
19 be legitimate for Pennsylvania to subsidize the
20 production of fuels -- and the Council does not
21 take a position at this time on the
22 particularities of those fuels -- such subsidies
23 should not come from the traditional AFIG
24 funding streams.

25 However, if the political realities are

1 that such a production grant component is
2 critical to the success of this legislation,
3 then the Council believes that there must be a
4 limitation on that, which would be developed and
5 placed in the law itself rather than left to the
6 discretion of managing entity DEP.

7 In light of the distinct possibility of
8 an overwhelming draw on the Fund for production
9 grants, Clean Air Council believes that it is
10 highly necessary to set forth a limit on the
11 percentage of the Fund that may be used for this
12 type of grant, fuel production grant, which
13 would not exceed 30 percent.

14 The last point, the focus of the AFIG
15 legislation must remain the advancement of
16 alternative fueled vehicles and the necessary
17 infrastructure with the fueling stations. The
18 committee is urged to resist and reject any
19 efforts to apply AFIG funds to stationary source
20 energy systems.

21 Thank you for the opportunity.

22 REPRESENTATIVE BARD: Thank you. Thank
23 you very much. I appreciate your testimony.
24 Most helpful. Thank you.

25 Our next panel provides some insight

1 into municipal state government sector and also
2 the research sector. We thank you for being
3 with us, and we will start off with Dr. John
4 Cherry from the Eastern Regional Research Center
5 of the U.S. Department of Agriculture.

6 Thank you so much, Dr. Cherry, for
7 being with us today.

8 DR. CHERRY: I thank you for inviting
9 me to be a part of this exciting day. I call it
10 exciting, and I consider it exciting just to be
11 a part of this testimony and hearing all of the
12 developments and the users that are coming forth
13 in using biofuels.

14 As you're well aware in visiting our
15 center, we're working on and doing research in
16 this area, working to improve the cost and
17 improve the properties to make this fuel much
18 more acceptable and usable. And this is a major
19 thrust in our program.

20 And as pointed out, I represent the
21 research community. I am just a small part of
22 that research community throughout the U.S. and
23 also worldwide, because when you look into
24 Europe and other parts of the world, there's
25 considerable development and advancements

1 ongoing and in the utilization of biodiesel.
2 And we are seeing it growing in this United
3 States, and not only biodiesel but ethanol. And
4 in fact, the latest numbers in ethanol
5 production are exceeding 2.1 billion gallons and
6 growing.

7 And the numbers that we have in
8 biodiesel are at 32 million gallons and growing
9 rapidly; a tremendous amount of interest in the
10 use of and development of these energy
11 resources. The more interest that's drawn by
12 the industry and end users working together and
13 the government legislation to support it,
14 because this is really a key factor in helping
15 this industry move forward.

16 We have had considerable involvement
17 with industries here in Pennsylvania as they are
18 coming forth to visit with us at our center, and
19 learn more and more about the technology and the
20 advances that are ongoing in the advancing of
21 this technology.

22 When you look at the entire research
23 program as a whole, you start with the feed
24 stocks. And the feed stocks -- and we heard
25 this morning about soybean as a major driver

1 behind this. And in fact, the soybean industry
2 worldwide has grown enormously. In fact, one of
3 the big drivers is South America. That is
4 almost equal to in production of soybeans as it
5 is here in the U.S., so you can manage the
6 amount of soybeans that are going on the market.

7 The industry is quick to say that there
8 is a tremendous surplus in soybean oil now
9 present, and they can supply an enormous amount
10 of biodiesel into the economy.

11 As each of these components develop,
12 you know, we keep understanding more and more
13 how to better utilize these feed stocks, and now
14 we are working on restaurant greases. And these
15 are waste by-products of our fast food industry.
16 This is a key feature in the applications. In
17 fact, the cost of these feed stocks are much
18 lower than that of soybean.

19 So there is a key factor in lowering
20 the costs of the feed stock, and that is really
21 a major component when you start talking about
22 what is important to lowering the costs as one
23 feature in lowering the costs of biodiesel.

24 The same thing is occurring in the area
25 of corn, in ethanol. Corn is the major driver

1 behind producing starch. The starch is what is
2 utilized in the fermentation process for
3 ethanol.

4 We are talking in terms of what is
5 potential here in the eastern corridor, and that
6 is barley. The barley industry has become very
7 interested in the potential of putting the
8 starch or producing the feed stock that could go
9 and drive into this marketplace, which opens the
10 opportunity for developing these kinds of
11 processing plants here in Pennsylvania and all
12 throughout the northeast.

13 And as of now, there are no plants in
14 this northeast, no production plants. If you
15 look on a map of the U.S., everything is
16 centralized in the middle states of the midwest
17 states of this country.

18 So there's a drive and there's an
19 interest, and it is coming to us through various
20 visits from Pennsylvania and a number of the
21 other states in this northeast corridor to learn
22 more about what it is that will help them to
23 develop this industry and drive this into our
24 economy as more and more users become
25 interested.

1 I am quite excited about the
2 Pennsylvania Turnpike as part of this. About
3 five years ago, they visited the center and we
4 had a unique northeast group meeting. And they
5 had mentioned that they were going to go in this
6 direction, and I am learning more about this
7 activity at B-20 and using B-20.

8 So these are the kinds of things we get
9 excited about in learning more about and working
10 with those who are interested in moving into
11 this field.

12 Now, the next aspect of it is the
13 processes, improving and lowering the cost of
14 the process of these feed stocks. This is a
15 cost that has to be dealt with. And we are
16 looking at various enzymes, various different
17 types of catalysts to help lower the costs in
18 biodiesel.

19 On the ethanol side, we are looking at
20 coal products that come out of the process.
21 When you start talking about taking the starch
22 and running it through the fermentation process,
23 there are still other components that are part
24 of the kernel of the corn or of the barley.
25 These are where we get our coal products from.

1 The potential is for various food
2 components, various health components. There is
3 selected components that are there that are
4 cholesterol lowering, have cholesterol lowering
5 properties. There's a tremendous interest in
6 this. Also, the hemicellulose, other starches
7 or other carbohydrates and proteins that can go
8 into biodegradable green chemistry.

9 So when you are talking about green
10 chemistry or green buildings, you have to look
11 at construction materials that go into those
12 buildings and what can be derived from these
13 by-products and coal products that come out of
14 this processing industry that add to the value
15 of the products that come out of it. And then,
16 of course, the fuel properties and the quality
17 are all part of it.

18 If you start looking at the fuel
19 properties, you are hearing that the B-20, the
20 diesel, has competitive properties of that of
21 diesel. And then along with it you get the
22 benefits of the green chemistry, the lowering of
23 the particulates and other by-products.

24 And of course, so important is in the
25 school systems to hear all of these kinds of

1 discussions and to hear about from our Secretary
2 this morning the concern about our children and
3 asthma becoming an issue. And, of course, you
4 want to eliminate that.

5 And then to hear that the kids are
6 feeling better because B-20 is being used. And
7 that is only B-20. Can you imagine what it will
8 be like when it gets to B-50 and we get the
9 production systems up, you know, because we are
10 only in the early stages of producing this. And
11 Minnesota has gone to legislation to -- that you
12 have to use a B-2. So the opportunities are
13 there and they are coming and the legislation's
14 coming also along with this.

15 And then, of course, the last component
16 is the users. And I keep bringing this and
17 intertwining this comment within my story line,
18 is that the school buses but the farmers
19 themselves. I mean, the farmers are very
20 interested in it. And the thing about it is, it
21 is all biodegradable. It is green fuel, you
22 know, so you are not concerned about polluting
23 the farmland, which is a problem with your
24 nonrenewables.

25 And then you talk about marine or

1 boating, the boating industry and polluting our
2 lakes and our streams. And the mining industry,
3 its emission is the -- I guess the ignition
4 level is lower, so it is less potential for a
5 hazard for explosion problems and also for
6 polluting in the mining system, because you
7 don't want this material, the nonbiodegradable
8 material, moving into our waterways in the
9 mining industry.

10 So I can go on and on in regard to the
11 opportunities here. The key thing is that
12 research is producing, reducing and finding new
13 technologies to lower the cost. We worried
14 about the cost. And of course, legislation can
15 help in that regard. But just as importantly,
16 research can help in that regard and research is
17 helping. The costs are coming down. I was
18 interested in 19 cents more a gallon. That is
19 darn good. It is getting better.

20 We are looking forward to being
21 competitive. And your petroleum-based product
22 costs are going up. We are lowering the costs.
23 Somewhere in the middle it is going to meet and
24 somewhere it is going to be very competitive and
25 work. So pay attention to what is going on in

1 research and where the new technologies are
2 coming, because they are going to help you make
3 it work.

4 REPRESENTATIVE BARD: Thank you very
5 much. We appreciate all of the work that you do
6 at your center, and it's been a special treat to
7 find out that you are located so close by.

8 DR. CHERRY: We are in your backyard.

9 REPRESENTATIVE BARD: Right over in
10 Cheltenham. Thank you so much for being here
11 with us today and sharing your expertise.

12 DR. CHERRY: Pleased to be here.

13 REPRESENTATIVE BARD: Mike McClurkin
14 who has been in the forefront of the effort to
15 use alternative fuels in his capacity at the
16 Pennsylvania Turnpike Commission and has really
17 made the commission a leader in this entire
18 field. So thank you for being with us.

19 MR. McCLURKIN: Thank you,
20 Representative Bard and committee. It is a
21 pleasure to be here.

22 When I was asked if I would be willing
23 to testify, I was like, Well, the legislation
24 really has nothing to do with the Pennsylvania
25 Turnpike Commission.

1 But I wanted to do this because as a
2 fleet manager and experiences I have had in the
3 past with some of the major obstacles that are
4 inherent with the alternative fuels program, I
5 thought maybe these experiences would be
6 valuable to the committee and its consideration
7 of this legislation, the many obstacles I feel
8 have attributed to the lack of us going forward
9 for the past many years on alternative fuels.

10 There's been a severe lack of knowledge
11 of the advantages of the alternative fuels.
12 Again, I want to compliment Representative Bard.
13 Symposiums such as today will help to breakdown
14 those barriers and allow school districts and
15 municipalities with the knowledge of the major
16 benefits, particularly the health and welfare
17 benefits and safety benefits that alternative
18 fuels have for the school children, but also the
19 residents of the municipalities involved.

20 The turnpike has about 920 vehicles,
21 motor vehicles, systemwide. And of those, 210
22 are now operating on biodiesel; 86 are capable
23 of operating on E-85 and will be whenever the
24 fuel becomes available in the Commonwealth. And
25 we have 62 that are operating on propane. So we

1 have made some significant strides over the past
2 several years to convert our fleet. And as each
3 year goes by, that percentage is going to be
4 increasing.

5 The PTC particularly is proud of our
6 efforts to clean up the vehicle exhaust
7 emissions in this area, particularly the
8 Philadelphia area. We concentrated our efforts
9 early on here.

10 All of the vehicles here are diesel
11 equipment, are operating on B-20, as well as a
12 significant number of our vehicles are operating
13 on 100 percent propane in this area.

14 And we are very proud of that to help
15 out probably a few drops in a very large barrel.
16 But if we can get other people to continue,
17 pretty soon there will be a faucet opening up,
18 and we are hoping that is going to be the case.

19 I think the other major obstacle has
20 been a lack of leadership at the federal and
21 state level for the lack of the alternative fuel
22 vehicles being accelerated further than they
23 have been.

24 Particularly, it wouldn't take much to
25 have the President say this will be done or if

1 you have the Governor saying this will be done,
2 it will be done. If it is not said, it will not
3 be done. I think those are areas that need to
4 be addressed, and I am hoping at the state level
5 that will be happening a lot more than it has
6 been.

7 How can we expect municipalities and
8 school districts to take a look at legislation
9 to spend money? There are a certain amount of
10 costs that are involved to make a change from a
11 comfort level. Gasoline and diesel are comfort
12 levels. It is something that the vehicles work
13 very well with.

14 You can't really address just by
15 looking at your environment, knowing that it is
16 environmentally polluting or by the small amount
17 of fuel that you use as to whether it is going
18 to make any big deal in foreign oil.

19 But collectively throughout the region,
20 throughout the state and throughout the federal
21 level, it is significant. And hopefully with us
22 in partnership with the clean air people as well
23 as the Clean Cities in the Philadelphia region.
24 We are very proud of that.

25 Another major obstacle that the bill

1 does address directly are the infrastructure
2 costs. And hopefully with the increase in that,
3 HR 120 increases the funding for the
4 infrastructure, and that is significant.

5 I know ourselves when we were looking
6 for years in which direction we were going to
7 go, it just pounds you down looking at the
8 costs, particularly with budgets being what they
9 are, you go to your boss and say, well, we want
10 to spend a couple hundred thousand dollars to
11 put one plant in to operate a few vehicles. It
12 is a pretty hard sell to do.

13 So that is some area that I hope that
14 the bill, whichever way it comes out, does
15 address this issue and, of course, the
16 incremental cost per vehicle or in the case of
17 biodiesel for the fuel itself. It costs a
18 little bit more at this point.

19 Hopefully with the research of
20 Dr. Cherry and those people are doing, that that
21 will eventually come down with some sort of
22 blends of biodiesel, whether it's with soybeans,
23 barley, grass or whatever else you are
24 experimenting with, as well as the waste of our
25 fast food industry be put to good use. We won't

1 feel as guilty getting a Big Mac, I guess, with
2 the use of the waste product.

3 Also, sufficient funds and to maintain
4 those funds annually is a very important area as
5 well. And I know that Bill does try to address
6 that. And I really wish the committee success
7 on promoting the bill, and I hope so. I would
8 like to see some more symposiums such as this.
9 It was really great, and I think we could make a
10 lot of strides. Thank you very much.

11 REPRESENTATIVE BARD: Thank you very
12 much.

13 And now, Mike Love from the Energy
14 Association of Pennsylvania, also a leader in
15 promoting alternative fuels, leading the way in
16 energy usage in the State of Pennsylvania.
17 Thank you for being with us.

18 MR. LOVE: Thank you, Representative
19 Bard, and thank you both for waiting around. I
20 appreciate it.

21 I have the privilege of representing
22 the electric and gas utilities of the state, and
23 I had the distinct honor to serve on the Bar
24 Task Force, which I had the pleasure of serving
25 with Joe and Michael who you've heard from, who

1 I learned a lot from during the time period I
2 was there.

3 I think the leadership that's shown in
4 House Bill 120, 125 and the plethora of the
5 bills that have arisen from that Task Force are
6 to be commended. It's a tribute to
7 Representative Bard and everyone who is on that
8 Task Force. Because truly what we are trying to
9 do here is we are trying to change behavior and
10 focus of a society.

11 And if we look at historically what
12 have been our two most successful campaigns to
13 change behavior and change focus, we'd have to
14 look at recycling and seat belts.

15 And if you looked at those two, you
16 would see that the success of that was started
17 in the schools and in government, where the
18 schools and government led by example through
19 education and through the usage themselves of
20 seat belts, the usage of themselves in
21 recycling. And that is what led the way towards
22 a societal change.

23 So in the battle to change opinions,
24 behaviors, thoughts, so that people become
25 receptive to the use of alternative fuel uses,

1 there is probably no better place to start than
2 in the schools and in the government.

3 One of the aspects I think that is most
4 compelling about House Bill 120 that does not
5 quickly come to mind, because we all get excited
6 as I did when I rode in the vehicle that was on
7 natural gas from the parking lot in here, I may
8 have just been excited to get out of the rain.
9 But beyond that, that is exciting and that is
10 something tangible and people like to look at
11 that.

12 My way of looking at the future is that
13 I will be far more excited when I see the
14 alternative fuel vehicle infrastructure along
15 the turnpike because I truly believe that one of
16 the really strong aspects of Representative
17 Bard's bill is that it finally addresses the
18 infrastructure. The infrastructure is not sexy.
19 It is not a beautiful vehicle, but it talks
20 about what makes the whole vehicle program work.

21 The state to its credit has many
22 alternative fuel vehicles, but they can't
23 maximize them to the extent they want to because
24 of the absence of infrastructure.

25 And if we are to be the leaders that we

1 are seeking to be in the alternative fuel
2 vehicle world, obviously having infrastructure
3 that attracts people to drive their alternative
4 fuel vehicles from other states might not be a
5 bad tourist activity either.

6 Another aspect that I think is
7 extremely compelling about this bill is that it
8 does not try to decide what future technology or
9 what future fuel types will be the winners in
10 the marketplace. I don't know. I am in energy.
11 I can't tell you what our fuel of the future
12 will be.

13 I hope it will be a well diversified
14 fuel, because we've certainly seen the problems
15 associated with relying on one fuel. And so I
16 don't know what that fuel type of the future is.
17 I can't even decide which diet to choose. So I
18 don't know if I am going to be able to choose
19 what the energy type is.

20 But what's so wonderful about this bill
21 is that you don't have to. It just says
22 anything but that. And that is a tremendous
23 accomplishment.

24 You have been patient in listening to
25 me, and I am going to shortcut this a little

1 bit. Before I do, since Michael has come back
2 into the room, I want to commend him for
3 pointing out some weaknesses -- and I dare say
4 that -- that I would like to see addressed as
5 well.

6 I agree with the point he made that on
7 page 4, lines 18 through 23 should be
8 eliminated. We are seeking to finally turn
9 around a situation where this state has
10 collected more money than it's spent.

11 All of the marvelous encouragements
12 that come in the latter section, those lines
13 should disappear. That's just kind of the
14 remnant of what got us into this problem in the
15 first place.

16 I congratulate both of you for first
17 staying around and, secondly, being so
18 concerned. Because as we have heard this
19 morning and this afternoon, there's some true
20 health reasons for making these changes.
21 There's certainly some true security reasons for
22 making these changes, and there is certainly
23 some pride to these changes. Thank you.

24 REPRESENTATIVE BARD: Thank you very
25 much. While we have you here captive, can I ask

1 you to comment on the efforts by some or the
2 interest by some in incorporating stationary
3 sources in the AFIG program?

4 MR. LOVE: I think there are a lot of
5 well-intentioned people that are trying to come
6 up with a lot of well-intentioned things. I
7 think that when I think about it, I come down
8 the same way Michael did, is that there are very
9 few places that you can encourage alternative
10 fuel vehicles and this is one of them.

11 And as we learned in our Task Force,
12 when all is said and done, our reliance on
13 foreign oil begins and almost ends with the
14 vehicle.

15 You are not going to change that, that
16 tipping point, until you change the vehicle
17 composition of this society. And the only way
18 you are going to do that is through changing.

19 So while I appreciate the
20 understanding, I appreciate the intention, there
21 are many good things in life, but this is one
22 method that has been chosen to try to change our
23 transportation mix. And sadly, it's been taking
24 in more dollars and less has been going out the
25 door and we can't wait, in my opinion, much

1 longer.

2 So while there are other many wonderful
3 alternatives, I could think of diseases that I
4 would like to work on, other such things, this
5 is something that has been designed for
6 alternative fuel vehicles. And it is my opinion
7 it should stay that way.

8 REPRESENTATIVE BARD: Thank you very
9 much. I would like again to thank our Executive
10 Director for his efforts to organize the hearing
11 today, and I certainly thank all of our
12 panelists and the members of the committee who
13 were present today for taking time to consider
14 these important pieces of legislation and these
15 important questions.

16 And also I thank the members of our
17 audience for being with us. Many of you sat for
18 six hours now through the energy symposium and
19 now through the hearing. So, again, a final
20 thank you to the Abington School District for
21 all of the facilities that you have made
22 available to us.

23 DR. SICHEL: Thanks. My pleasure.

24 (Concluded at 2:47 p.m.)

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I hereby certify that the proceedings
and evidence are contained fully and accurately
in the notes taken by me on the within
proceedings and that this is a correct
transcript of the same.

Lorraine K. Troutman
Lorraine K. Troutman, RPR
Reporter/Notary Public

