COUNCIL OF THE CITY OF PHILADELPHIA

JOINT COMMITTEES ON EDUCATION, ENVIRONMENT

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Room 400, City Hall
Philadelphia, Pennsylvania
Wednesday, December 5, 2007, 1:45 p.m.

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Resolution 070807 - To investigate the steps the School District of Philadelphia is currently taking regarding the use of green technologies in the construction and renovation of school buildings...

COUNCILMEMBERS PRESENT:

Jannie Blackwell, Chair
Blondell Reynolds Brown, Co-Chair
William K. Greenlee
James F. Kenney
Frank Rizzo
Daniel J. Savage

- - -

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COUNCILWOMAN REYNOLDS-BROWN: Good afternoon. The Committee on the Environment scheduled to hear Resolution 070599 will be recessed until the call of the Chair.

This afternoon, we're delighted to have joint committees on the Environment and Education to consider Resolution 070807.

Able to join us thus far are Councilmembers Frank Rizzo and Bill Greenlee and Councilman Daniel Savage.

Will the clerk please read the title of the resolution.

THE CLERK: Resolution No. 070807, a resolution authorizing City Council's Committee on Education and Committee on the Environment to hold joint public hearings to investigate the steps the School District of Philadelphia is currently taking regarding the use of green technologies in the construction and renovation of school buildings, and to

explore the feasibility of using such technology in all future school construction of renovations.

COUNCILWOMAN REYNOLDS-BROWN: Thank you very, very much.

With that backdrop, we would like to ask Miss Carol Fudge of Nora flooring to please move to the witness table. We understand you're under a tight transportation schedule.

(Ms. Fudge not present at this time.)

COUNCILWOMAN REYNOLDS-BROWN: Okay. We will allow her to provide testimony as soon as she arrives.

While we're waiting, why don't we ask Panel No. 1 to come forward, which would be: Fred Farlino, the Chief Operating Officer with the School District of Philadelphia; and Pat Henwood, Capital Programs Office with the School District of Philadelphia.

Please come forward and offer

your testimony, and recognize that when Carol Fudge returns, I'll push the pause button for us to have her meet her train schedule.

(Witnesses come forward.)

MR. HENWOOD: Good afternoon, Councilwoman.

COUNCILWOMAN REYNOLDS-BROWN: Good afternoon. Please state your name for the record.

MR. HENWOOD: My name is Pat Henwood, Senior Vice President of Capital Programs. Along with me is Joe Joseph, Construction Manager and Director of Construction Services for the School District of Philadelphia. Fred Farlino is not present today.

COUNCILWOMAN REYNOLDS-BROWN: Very well.

And let me please welcome the Chair of the City Council Committee on Education, my colleague Councilwoman Jannie Blackwell.

Forgive us. Miss Carol Fudge,

why don't you join us at the witness table because 'cause we do recognize that your clock is ticking, and we want to get you out of here so that you don't miss your transportation.

(Witness comes forward.)

MS. FUDGE: This is my first time here.

COUNCILWOMAN REYNOLDS-BROWN: Okay. We thank you, and we're prepared to hear your testimony on Resolution 070807.

MS. FUDGE: Well, this is -- you have to forgive me 'cause this is my first time doing this, but I've just been asked to speak. My name is Carol Fudge; I'm from Nora Rubber Flooring, and I am actually in charge of the environmental issues at my company.

And I believe that green building and schools is very important for many different reasons. I think everybody knows the most important

reason is the health and welfare of the people within the building. And by building green, you increase productivity, you increase the health -- I mean, having buildings that are not healthy indoor areas, of course, you know, lead to a lot of problems: They've been proven to lead to asthma and other types of allergies.

And they just do not promote good learning the way that a really healthy atmosphere does. They take into consideration things like good indoor air quality and proper lighting and proper acoustics.

And I think, also, what's really important is that they teach the children from a very young age how to grow up and be environmentally responsible, which I think is really important in America because we just are not as far ahead as some parts of the world environmentally-wise, and we

really need to think about the future of, you know, our world and the interiors of the building, you know, building them responsibly will help to contribute to that education of the children.

So, I mean, there are a lot of things that can be done. I know you probably all know that -- about the LEED system, and a lot of states and school districts have adopted LEED. And that is, I guess, one of the ways that you can incorporate some green building standards.

I know that some -- I actually have a document here; I can leave a couple of documents for you on different, you know, municipal, state and school initiatives that have taken place across the country. Sometimes you can give some financial incentives, tax breaks or other financial incentives for green building. You can adopt LEED for schools as is, you can

make some modifications based on your own priorities.

But I think it's very -- for me it's strongly important, the indoor air quality. And I think, you know, LEED is not a perfect system, but I think it's a really goods basis and probably just the only thing that we have right now that we can kind of try to strive to achieve.

And I think what you need to do is go beyond that. And sometimes LEED, when you talk about indoor air quality and when you talk about when you first purchase, you know, a product, is it low emitting or not, and I think you need to think about the ongoing life of that particular product and how it's maintained 'cause it can be environmentally friendly or not,

Our products just happen to be green (indiscernible) indoor air-quality-certified, and I think it's good if you mandate that products

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within a building have independent third-party certification of some sort; otherwise, you're really just taking the chance that the claims that the manufacture is making are, you know, true. So I think that's very important to think about.

COUNCILWOMAN REYNOLDS-BROWN: Thank you for your testimony.

We will pose questions with you so that you can, again, leave, and then we'll move to our other witnesses.

Now you said that you can mandate that certain products -- what -- complete the sentence for me.

MS. FUDGE: Oh, third-party certification? Like --

COUNCILWOMAN REYNOLDS-BROWN: What kind of certification?

MS. FUDGE: Third-party.

COUNCILWOMAN REYNOLDS-BROWN: Third-party certification.

MS. FUDGE: Yes. Kind of like

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if something's green (indiscernible) certified, it's actually certified by an independent organization and not by -- within the company themselves. I know some companies, you know, certify themselves that their products meet certain standards, but unless it's third-party certified, you don't really know that's true.

COUNCILWOMAN REYNOLDS-BROWN: We welcome the documents that you will leave with the chairs of this committee so that we can have the benefit of that information and background as well.

You say other parts of the world are far advanced in this area. Give us two or three examples.

MS. FUDGE: Well, I think, for example, you know, my product is made in Germany, and when I go to Germany -- my mother is German, and when you go over there, they are just more aware of preservation of

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preservation of natural resources 'cause they -- they just don't have -- when I talk about like living spaces and different things like that, they don't have as much open space or as much living space as we do here or even as many resources. They pay higher taxes so they can't afford to buy a lot of things.

I think here in America, we're a kind of a throw-away society, and so we buy a lot of things and we throw them away, and that's kind of a waste of, you know, good resources.

Over there, for example, little things -- like they recycle everything. Like you'd never go to the airport and not have separate bins to recycle things. I mean, here we just don't do that; everything is just thrown away, and we don't have any space to put all this trash in. We don't know what the consequences are of putting all of putting the plastic

bottles and stuff into landfills; it's really long term, and we don't have any definitive research on that.

COUNCILWOMAN REYNOLDS-BROWN: Are there any other questions from members of the committee?

(No questions.)

COUNCILWOMAN REYNOLDS-BROWN: Nora flooring is what kind of flooring?

MS. FUDGE: Rubber floor covering.

COUNCILWOMAN REYNOLDS-BROWN: Rubber.

MS. FUDGE: Mm-hmm. I can actually leave you some literature on that as well. We do have a brochure that talks about the green aspects of our floor coverings.

COUNCILWOMAN REYNOLDS-BROWN: Okay then. Well, we thank you for the information and for the background and for the information that you will leave as we -- we're in an

information-gathering mode now, which will sort of frame and direct the next steps around what we -- where we hope to see the School District move towards.

MS. FUDGE: Yeah. And I also wanted to mention -- I know this has nothing to do with schools, but Kaiser Permanente, it's, you know, the largest nonprofit hospital organization in North America, and, you know, they did extensive studies on how to build green -- not only to be environmentally responsible but also to ensure the health and further the healing of the inhabitants of their hospitals.

And they went through extensive tests of all their interior finishes, and they came up -- they actually -- now they have a standard whereby they only use either Nora Rubber Flooring or Stratica because those two products came out to be on

top regarding not just on the environmental aspects but also the performance characteristics.

So I think we need to take into conversation environmental and performance, and then, you know, maybe try to think about some standards that you might want to develop for, you know, a -- standard floor coverings that you should use within every type of school, just because of the performance aspects.

COUNCILWOMAN REYNOLDS-BROWN: That triggers another question: Do you know -- the recommendation that you just made, do you know that to be in existence at anyplace in the country, in any school district in the country?

MS. FUDGE: No.

COUNCILWOMAN REYNOLDS-BROWN: Okay.

MS. FUDGE: Not to my knowledge, but I think there's always

a first. And like I said, I know that, you know, Kaiser Permanente has a standard in place, and I think even some of the other hospitals like the Mayo Clinic, they're talking about getting a standard in place where they only use certain types of floor coverings or interior finishes, not just floor coverings.

COUNCILWOMAN REYNOLDS-BROWN: Okay then. Again, thank you for your testimony.

MS. FUDGE: Okay. Thank you.

COUNCILWOMAN REYNOLDS-BROWN: Gentlemen from the Philadelphia School District, if you again state your name and proceed with your testimony.

MR. JOSEPH: My name is Joe Joseph, I'm the Director of Construction.

MR. HENWOOD: Pat Henwood, Senior Vice President, Capital Programs.

The School District has very

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much been a proponent of the use of green technologies to achieve LEED certification. As a matter of fact, we have received gold certification for the first high school in Pennsylvania, the School of the Future.

We are in the process of constructing the Commodore Barry Replacement School that will be -- we are cautiously optimistic for a gold certification on that as well.

And the plans are a new small high school for Kensington, Kensington Creative and Performing Arts Center; that is planned to be a goal certification.

West Philadelphia -- how could I forget West Philadelphia. West Philadelphia High School is planning to be LEED-certified, and the Lucien Blackwell joint venture with PHA and the City, an unprecedented partnership there that we look forward to

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constructing that in green fashion as well.

COUNCILWOMAN REYNOLDS-BROWN: Well, let me hear all of the testimony, and then we will open it up for questions.

Do you have any written testimony?

MR. HENWOOD: I have no written testimony.

COUNCILWOMAN REYNOLDS-BROWN: Okay, not a problem.

Sir?

MR. JOSEPH: Yes. In addition to what Patrick has already mentioned, we have not only taken a new building LEED standard that will involve future construction of our new building, but we've evaluated our existing standards, and we found that we were only shy 15 points from achieving silver certification for existing buildings.

So we did an evaluation and a

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presentation, assigned a dollar value per square footage to allow us to pursue silver certification for all of our existing structures, and we have approval to do that.

We're in the process of modifying our standards so that, in fact, we can add it to our website as an appendix to the existing standards that will allow us to, in kind, replace every component in the building, as we do so, with a green component.

Now, as you know, public entities do not have the luxury of taking a building and decommissioning it and renovating it from top to bottom. So with the renovation piece, we do that in piecemeal, but we are in the process of having some preliminary conversations with the Philadelphia Green Building Council to discuss LEED for existing buildings that will allow us over a period of a year life, based

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on our life-cycle costing of replacing boilers, chillers, et cetera, to complete that LEED certification and then achieve that certification for that particular building.

That hasn't been solidified at this point.

But, also, I would just -- I just really have to mention how excited we are about receiving the gold certification for the School of the Future at Parkside and Girard Avenue.

And our understanding -- and I don't believe it to be incorrect -- is that we're the first high school in the megalopolis of Boston to Washington that has been gold-certified. So we're really excited about that.

COUNCILWOMAN REYNOLDS-BROWN: That also needs to be celebrated and in the paper.

MR. JOSEPH: And we're

waiting -- we're waiting for our plaque, our official plaque from the Green Building Council. As soon as that comes in, we will have a celebration.

COUNCILWOMAN REYNOLDS-BROWN: Very well. Make sure you invite us all.

MR. JOSEPH: We will. Thank you.

COUNCILWOMAN REYNOLDS-BROWN: Councilmember Bill Greenlee?

COUNCILMAN GREENLEE: Thank you, Madam Chair.

I could be sarcastic and say it's good news and that's why it's not in the paper.

(Laughter.)

COUNCILMAN GREENLEE: But I wouldn't say that.

First of all, congratulations. It sounds like you're doing a great job with that.

MR. JOSEPH: Thank you.

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COUNCILMAN GREENLEE: On that silver certification issue with the existing building, I think you mentioned chimneys. Could you just give a couple examples of what gives you that 15 percent, what kind of stuff you would do.

MR. JOSEPH: The 15 additional points above our standard?

COUNCILMAN GREENLEE: Yeah, 15 points, yeah. I'm sorry.

MR. JOSEPH: There are things as simple as green cleaning products that we would use that could give us a point.

There is the building as a teaching tool to involve the children in understanding how the building operates.

And then there are more extensive components that would relate to the HVAC system. Instead of a standard chiller system, we may implement a system that has an ice

storage chest where we line the coolant lines through the ice storage chest at night, when we make the ice at a cheaper rate, and it helps to cool that cooling material down before it reaches the chiller.

Another thing is dealing with the Water Department, as we have been, in terms of complying with their requirements for capturing rain water. We have decided to go with a cistern system instead of a retention base in our other systems that will allow us to capture rain water, take it in the building and purify it and use it for non-drinking water.

We also have looked at changing the type of roof to a more reflective surface. We have -- at School of the Future, we have installed a partial green roof, and we're now comparing the difference between a green roof, which is basically a roof with dirt and

vegetation to help insulate and help absorb some of the rain water; we're comparing that against a reflective roof.

So we think that we're going to go in the direction of a reflective roof only because of the maintenance issue that's involved with maintaining the group roofs.

And, as you know, maintenance dollars are hard to come by in terms of budget.

COUNCILMAN GREENLEE: We've heard that.

Okay. Well, it certainly sounds like you're moving very much in the right direction.

MR. JOSEPH: Thank you.

COUNCILMAN GREENLEE: So good luck and thank you.

MR. HENWOOD: Thank you.

MR. JOSEPH: Thank you.

COUNCILMAN GREENLEE: Thank you, Madam Chair.

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COUNCILWOMAN REYNOLDS-BROWN: Councilwoman Jannie Blackwell.

COUNCILWOMAN BLACKWELL: Thank you very much. Good morning and good morning to the panel.

PANEL MEMBERS: Good morning.

COUNCILWOMAN BLACKWELL: And we wanted to say that we've been proud of the negotiations in this area for all of our schools in West Philadelphia, and we certainly thank you for your commitment to and work in this area.

Thank you very much.

PANEL MEMBERS: It's our pleasure. Thank you.

COUNCILWOMAN REYNOLDS-BROWN: Let me say that I'm pleased to hear about the audit of City schools moving them towards the silver standard.

MR. JOSEPH: Yes.

COUNCILWOMAN REYNOLDS-BROWN: One trigger or interest for the hearing or purpose for the hearing is

what we're going to do differently and smarter going forward with new construction.

And so, are there any standard operating procedures in place for all new construction around the issue of greening?

MR. JOSEPH: Yes. I think that one of the major things that really never shows up in the final product is, for example, the separation of construction products that are waste products, if you have some wood left over that would be discarded.

We're now separating construction materialities into different Dumpsters, and they go to an appropriate waste site instead of combining them all, where they have to be separated.

We're also buying products that are made within a 500-mile distance to the construction site,

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which will reduce the transportation fuel usage.

So those are the kinds of things we're doing that is really not seen in the finished product.

COUNCILWOMAN REYNOLDS-BROWN: So you have a hit list of those types of procedures, if you will.

MR. JOSEPH: We're -- we do. That's part of our specification.

COUNCILWOMAN REYNOLDS-BROWN: Okay.

MR. JOSEPH: But, you know, we're open to, and we continually work with, the Green Building Council, and we're open to any suggestions or, quite frankly, review of our standards to help us improve beyond what we know.

MR. HENWOOD: Our handbook of design includes green features.

COUNCILWOMAN REYNOLDS-BROWN: Oh.

MR. HENWOOD: That's what Joe

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alluded to earlier.

Our design standards are the basis of design the of the new construction. They are moving toward green and they will be totally green by -- within the next three or four months. We've been working on it.

COUNCILWOMAN REYNOLDS-BROWN: And so that is to suggest, then, that the School District will now only do business with general contractors who "get it" around greening?

MR. HENWOOD: Absolutely. It will be a requirement of the specifications, the bid document, so to speak.

COUNCILWOMAN REYNOLDS-BROWN: Okay.

MR. HENWOOD: So they will have to conform to those regulations in the specifications.

COUNCILWOMAN REYNOLDS-BROWN: Okay. Any other questions for this panel?

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(No further questions.)

COUNCILWOMAN REYNOLDS-BROWN: Well, we thank you very much for your attendance. Thank you very much.

PANEL MEMBERS: Thank you.

COUNCILWOMAN REYNOLDS-BROWN: If we can now please have come forward: Merilee Herrigan, with the Alliance to Save Energy; and Liz Robertson with the Energy Coordinating Agency of Philadelphia.

(Witnesses come forward.)

MS. ROBINSON: Good afternoon and thank you very much for holding these hearings on such an important topic.

I'm Liz Robinson. I direct the Energy Coordinating Agency in Philadelphia. ECA helps people conserve energy and promotes a sustainable and socially equitable energy future for all in the Philadelphia region.

If you don't mind, since we

were able to set up this PowerPoint, I thought I could just present over there, and so I'm not going to read the testimony.

COUNCILWOMAN REYNOLDS-BROWN: Terrific. That's good.

We're going to provide you with a handheld mic so that our transcriber can take down all of the testimony.

MS. ROBINSON: Okay. Sorry. I'm having a technical difficulty here.

The City of Philadelphia and the nation are really facing a twin crisis. Just to simplify it, the crisis that we face with regard to energy are global warming and peak oil.

And the first of these -- the crisis that is most present every day is really peak oil, and yet very, very few Philadelphians recognize that we are here, at the peak of oil

production worldwide.

Energy prices are going to continue to rise, as you know, and the days of affordable energy, cheap energy, really are over.

So this is one of my favorite sayings here from Saudi Arabia: "My father rode a camel, I drive a car, my son flies a plane, and his son will ride a camel."

Oil is an essential resource, not just for home heating and transportation, but also for the manufacture of consumer goods. Virtually 65 percent of all consumer goods use oil as a raw material, which brings me to this wonderful saying: "Oil is too precious to burn."

And it's really amazing how little most Americans understand the energy problems that we face. We are at a really critical time, and yet there is so little public understanding of these issues.

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Philadelphia has had very high energy prices for many, many years, and in combination with a very high number of low-income households, this has created a persistent energy poverty problem for the City.

What we're showing here in this graph is the projection of the rate of increase in energy prices. Energy prices are predicted to rise between 6 and 10 percent per year on average every year.

This is a 6 percent slope. So the orange area that's rapidly growing over time is what we call "the affordability gap."

We are -- in the '90s, when energy prices were relatively stable, we were able to span this gap pretty well with bill-payment assistance programs, LIHEAP, and Crisis, and the like.

But as home-heating prices -- particularly natural gas and fuel

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oil -- have doubled in the last few years, the affordability gap has rapidly widened. We are no longer able to span this gap with the available assistance programs, and more and more people fall behind, delinquencies rise every year, as you know, only too well, and terminations rise.

And, as you also may be aware, the affordability gap is trapping more people. It is the case now that the majority of delinquencies and terminations are occurring outside of the low-income population. And so the working poor, people on pensions, the group just above poverty level, are taking it, frankly, right between the eyes. There are no assistance programs for them.

These are actual numbers in Philadelphia. In addition to the doubling in oil and natural-gas prices that we've seen in recent years, we

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are facing the end of the rate cap on the electricity prices. PECO's rate cap will expire in 2010. PECO is projecting anywhere from a 15 to a 45 percent rate increase at that time.

This just very quickly: What the world scientists are saying now is that in order to begin to stabilize climate, we need to reduce greenhouse gas emissions by 80 percent by 2050. Carbon dioxide is the largest of those greenhouse gases and is the gas that is produced when we burn fossil fuels.

And in order to reduce carbon dioxide emissions by more than 80 percent, it will require energy conservation in existing buildings.

This is the data from City Council and the air quality study just recently developed in Philadelphia, the greenhouse gas emissions in three basic areas.

Buildings, not surprisingly, are the source of slightly more than

half. Fifty-one percent of all greenhouse gas emissions in Philadelphia are in buildings. And, as you know, most of those buildings already exist, so it is the case in Philly that 65 percent of the square footage in the City are homes, are residences.

So home-energy conservation is a critical element in bringing stability to energy prices and to global warming, to climate change in Philadelphia.

This is just a graph which shows, very simply, the available clean energy resources in the United States. The largest of these bars is the gray wedge on top, and that is energy conservation and efficiency.

So it's showing that 51 -- again, 51 percent of all clean energy resource in the United States is energy conservation and efficiency. So we can deploy wind and solar and

biomass. But, again, the most important resource for the future for energy is efficiency and conservation.

This is very important for people to recognize, that conservation is not only the cheapest, the cleanest, and the most abundant of the clean-energy resources; it's also the only one that can help us lower price.

So for every 5 percent that we lower demand -- that is, that we back down on our consumption -- we can cause prices to drop by out 20 percent.

So this just outlines -- ECA is working very closely with the City to develop an energy action agenda for the City, but the role that education plays here is in buildings, all buildings, whether it's school building or homes or City Council, and this office, there are two equally important ingredients to save energy.

One is the hardware and the

other are the humans. Both are equally important. And so energy education in Philadelphia very broadly is absolutely critical to beginning to change the way we use energy.

I won't go into this in detail, but Philly really does have essentially pretty efficient housing structure; it's just not been well maintained on the whole.

But it is very easy to make row homes highly efficient, and this is frankly a program which would involve all schools, an education program which would involve all schools and get children involved in community is a really excellent model for Philadelphia to think about at this juncture.

The great thing about energy conservation locally is that it will create a great number of green-collar jobs. These are exactly the kinds of jobs that we need in town.

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This is just -- I'll just pause here for a second. Pennsylvania's finally making strides in energy efficiency in new construction. These are 50 homes, the first group of homes that PHA built to the Energy Star Home standard. This happens to be the Lucien E. Blackwell project in West Philadelphia, and ECA is working with PHA now on a second group of homes in North Philly.

But now the State of Pennsylvania is using the Energy Star Home standard for all of the PHFA tax credit work, and this is a standard that we strongly recommend Philadelphia support to build all new homes to the Energy Star Home standard. Moving toward this standard is critically important.

So we need a lot of things, but the last button there on this slide is public education. Public education is critically, critically

important. It's very cost-effective in terms of the amount of energy that is saved for the dollars spent in education programs, and it is a critical companion to any technology program, any hardware deployment program.

So I -- at this juncture, I would strongly recommend -- not that it's -- well, I think probably the next step that would make the most sense -- let me explain: ECA just received a grant from the Department of Energy, and one of the things that we will be able to do in that grant is hire national experts to help design an energy education program for the State of Pennsylvania and for the City. We would like to work very, very closely with Council and with the new administration in designing that education program.

And one recommendation would be for Council to consider convening

an energy education task force at this time and charge that group with developing a plan for the City that could then be presented to Council and to Mayor Nutter within a few months, you know, whatever timeframe seems most reasonable.

But if it's a program that would impact public schools, it would be important to do that in times for the schools to be able to implement it next year.

Sorry for the -- I have a cord that's loose.

COUNCILWOMAN REYNOLDS-BROWN: Do you have some paperwork that describes what you just presented?

MS. ROBINSON: I do have written testimony but it doesn't have the slides on it.

COUNCILWOMAN REYNOLDS-BROWN: I see.

MS. ROBINSON: But I could easily get that to you.

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COUNCILWOMAN REYNOLDS-BROWN: Please, if you could forward that to the call of the Chair.

MS. ROBINSON: I could.

COUNCILWOMAN REYNOLDS-BROWN: That's terrific.

Let's first hear from our next witness, and then we'll open it up to any comments or questions. Please state your name for the record and proceed with your testimony.

MS. HARRIGAN: I'm Merilee Harrigan. I'm the Vice President for Education at the Alliance to Save Energy, which is based in Washington.

And we'll see if we can get this computer working here.

I want to thank you for the opportunity to speak. I'm... I'm going to be following closely on what Liz has talked about in terms of the crisis that Philadelphia and the country and the world face and particularly on the education

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suggestions that she made.

My organization, the Alliance to Save Energy, is a coalition of business, government, consumer, and environmental organizations, and we focus on energy efficiency. That's -- and one of our major program areas is in energy education, both education of the public but especially education of young people.

And what I want to present to you is some of our experience in involving young people in helping -- in, first of all, learning about energy and the ways that that's integrated into their school instruction; and, secondly, in being educators, champions, ambassadors, and even implementors of energy-efficiency practices in schools.

The Alliance to Save Energy worked with the School District of Philadelphia over a period of about seven years in implementing a program

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we have called "Green Schools." We have not current -- our funding ran out for that, and we haven't been able to do that for the last couple of years, but it did provide a very good framework and sort of demonstration of what can be done, and it provides a really good foundation on which something else -- a continuing program could be run.

So -- I already mentioned the Alliance.

So just, you know, what do we know here? As Liz said, home energy costs are an increasingly difficult burden. Educating citizens about how to lower their bills is challenging, and I think you -- you may not really understand or appreciate what a valuable resource you have here in Philadelphia in the Energy Coordinating Council; it is a fabulous resource. Not -- other cities do not have this kind of a really expert and really

competent resource.

So I just want to say that they are doing a lot in bringing energy efficiency to Philadelphia. And as much as they're able to, they're working already on educating adults.

And we know that it's difficult to reach adults with a message about energy efficiency or anything that's good for them, frankly. Everybody's Busy. Even if you're strapped by your bills, you've probably got bigger fish to fry in your household than thinking about whether you're turning out your lights or whether you ought to put in a compact fluorescent bulb.

What we have discovered and I focused on in my work in energy-efficient education of consumers for about ten years before I started -- about 11 years working -- focusing on students. And one of the reasons that I made that shift is that it is so

difficult to reach adults, and it is so -- it is such an incredible opportunity to educate young people in really understanding in depth the issues about energy efficiency, climate change. The kids get this, they understand this. In a way that adults just are too busy to do.

And so, I think that building on the success of the Green Schools Program in Philadelphia previously and what we've learned in other places has some good lessons for Philadelphia.

So why young people? First of all, we have learned that young people can really make a difference in saving energy. The Green Schools Program focuses primarily on saving energy in school, and it does that because that's where kids are, that's where they spend their days.

Secondly, because they are the energy-users and citizens of tomorrow, it's important that they understand

these things, because once they leave the school environment, they don't have that support to do the learning.

Third, they can help their families reduce their energy costs. And we have seen that really happen.

And the fourth thing -- and this is critical -- is that this provides an excellent learning opportunity for students, because teachers will simply not incorporate this into their classroom unless it has learning value; that is their number-one priority.

I could talk for hours about how successful the Philadelphia Green Schools Program is, but I'm just trying to think about a couple of examples for this. We have a video, in fact, which I wish I could show you, showing some middle-school students that had done an analysis of appliances used in their middle schools. They had different wings on the school, and they went in

and counted the refrigerators and figured out how efficient the refrigerators were and all the different appliances. They came to school on an in-service day, when they had the day off, presented their findings to the teachers and to the principal and made a very compelling and professional case.

We have students in Philadelphia going to a workshop learning caulking and other skills to help save energy, and there are many, many other things that I could talk about.

So there are two contexts in which young people can do this education work, and one is in the context of their classrooms where it's built into instruction. And the other is sort of clubs and youth organizations out of the classroom; in some ways, it's easier because that class time is so valuable and scarce.

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So just a few examples of the way in other programs -- we have done the Green Schools Programs really around the country and around the world.

And we have students in California involved in really driving the change from incandescent light bulbs to compact fluorescent light bulbs. These are -- this is kind of the poster child of energy efficiency technology in the sense that you save 75 percent.

You know, the costs -- I would imagine -- I haven't run the numbers, but I would imagine that with your electricity costs that you're probably saving with one CFL, which, in the D.C. area, you can buy for $4 at Home Depot. It probably saves you $80 over the course of the lifetime of that bulb, which is ten times as long as an incandescent bulb.

So to get that message -- I

mean, have you maybe heard anything about CFLs?

COUNCILWOMAN REYNOLDS-BROWN: Yes.

MS. HARRIGAN: That's something that's -- so that's a -- and if any of you have had your children nag you about things, imagine having your kids nag you about replacing -- doing the right thing to save energy in your household; that's really what is happening in the programs.

We've had the kids become -- they have the moral authority, they get to tell their parents what they're doing wrong, which they love, and they are very effective.

Thermostat management -- I know a lot of people who are very highly educated that cannot figure out to use their programmable thermostat, and yet, it is one of the most cost-effective things; there is no comfort -- you know, down side, if you

turn your heat down while you're sleeping, if you turn your heat down when you're away from home.

You know, kids, they have this different like computer chip in their brain and they understand these things. Like the VCR, you know, we can get the kids to be the ones who program the thermostat.

Water-saving showers -- that's low-flow showerheads, which is another thing where students have taken the initiative to help in the context of a program, of course, that's providing these at a low-cost, helping get those in.

Weather-stripping and caulking, as I said.

And then taking energy efficiency into the community, so going beyond their own households. We've had some wonderful experience with students learning to do home-energy audits, maybe a little bit more in-depth and

helping to do energy audits.

We have a group in Maryland that is a group of high school students who attended a Saturday training on doing energy audits, and they've made a commitment that each students is going to do 20 home-energy audits in their community, and they're going to help other families save energy.

You know, you got to do this carefully. They have to have an adult. You know, they don't go into people's homes without an adult present, et cetera.

But they're loving it, you know. They're committed.

So on the same -- they're actually doing either home-energy audit or small-business energy audits. This is something we've also done in California, where the high school students go around to their small businesses in their area, and they actually find that businesses are more

receptive to students than they are to a utility professional coming to talk to them.

So, you know, this work if it's a simple kind of lighting retrofit. They're not -- if I don't want to present these students as becoming experts like a professional auditor, but they do know more about energy efficiency than most people, and they can provide valuable advice.

This is a student making a presentation to a retirement community.

And, you know, there -- we have resources -- there are resources available to help students learn, you know, in-depth, as much as a full three-day classroom training on auditing.

And I want to go back to Liz's point on careers, that this is absolutely the careers of the future. Utilities -- companies that are involved in energy efficiency and

sustainability are hurting for employees; they're looking for young people to get this training. So whether it's at the university level, at the community college level, the technical level, they need employees. So this is really a leg up.

I'm going to go really quickly through this presentation. This is a presentation that was developed by a group of high school students, and I resisted editing it.

It's a group of student -- a student awareness committee. They developed these objectives for their club, conserving natural resources, saving money in their school, educating students on energy conservation.

They did a school assessment. They took an inventory of lighting in the classroom, monitored the temperature, evaluated energy cost per classroom, identified areas of energy waste. They saved $40,000.

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They did all of the -- implemented all of these. The schools tends to have a lot of low-hanging fruit; there are a lot of opportunities. And these are things that, by and large, were free, were no-cost measures for saving energy.

So this is what they did with their knowledge that they gained. They got the whole school involved in understanding how students and teachers could impact energy use, how they could save energy. They developed PSAs that they showed at the school. They did a lot with recycling. Researched a whole group of activities that could save energy.

And in this particular school, they got a district to return half of the savings to the school that saved it, which is sort of a principle that we look to encourage everybody to do. So they used this funding -- they had the opportunity to have a voice --

obviously, the students didn't determine how the money was spent, but they did -- were able to make recommendations.

They did a lot of things, some of which saved more energy in the school -- installing blinds, planting shade trees, et cetera.

And so these students, these young people, are convinced. I mean, they will take this lesson in the rest of their lives.

So getting teachers to include education -- to include energy in education, this is challenging, as I said. Every school is under -- has got the screws turning on test scores, et cetera, but there are some very good reasons why it makes sense to bring this kind of real-world leaning, hands-on, project-based learning, into the classroom.

And we have found that we have some fabulous teachers in Philadelphia

that took this to heart and really integrated it in a big way into their classrooms.

So I -- there's just a whole range of opportunities for students to play a role in helping their families save energy, their schools save energy, and the larger community.

So there's a nice quote here from the city of Rochester:

"My students are taking an active role in saving energy. They're critical thinkers and problem-solvers for saving energy. They look at the broader picture in the operation of their school buildings and work as a team to obtain results."

Now, this is -- you can see that a teacher would feel this is something worth including in their classroom.

And so I encourage you to consider this in the plan that you put forward.

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COUNCILWOMAN REYNOLDS-BROWN: We thank you very much for your comprehensive testimony.

A couple questions. Who funded the green school -- green -- help me out.

MS. HARRIGAN: The Green Schools Program?

COUNCILWOMAN REYNOLDS-BROWN: Yes.

MS. HARRIGAN: It was funded by several foundations. It was actually originally funded by the Pew Charitable Trust, it was funded by the William Penn Foundation in Philadelphia, also by -- EPA provided a couple of grants.

COUNCILWOMAN REYNOLDS-BROWN: Okay.

MS. HARRIGAN: So we had sort of a patchwork of funding over the years, which eventually went away, and, you know, we weren't able to continue it.

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But the groundwork is there and the teachers -- many of the teachers are there to take it up again.

MS. ROBINSON: I think one of the keys to a large, widespread public education program is a shared savings program so that the school district would retain, let's say, 50 percent of the energy savings, and the school would retain the other half, or -- it doesn't have to be 50/50, but it's some split, should shared savings.

And those funds can be used to plow back for additional energy savings. You don't have to eat the entire apple at one sitting with energy savings; you can take it in stages. So you can do the low hanging fruit, the things that are very inexpensive to do first and use those savings to fund capital improvements.

So capital improvements are very expensive for the school

district, and that's going to be the biggest, you know, barrier financially. But there's a way to stage this so that you can almost self-fund out of the savings.

The Clinton Climate Initiative is another very, very important player now. They are as -- you know, Philadelphia was selected among 40 cities across the world, and the Clinton Climate folks are interested in having a discussion coming back, looking at Philadelphia in the second stage.

They have already implemented Stage 1, which included only New York and Chicago. But we are in contact with them, and they are interested in looking at Philadelphia in the next stage. And there's no reason why public schools could not be one of the main focus targets for that work.

COUNCILWOMAN REYNOLDS-BROWN: Final comments?

MS. HARRIGAN: Yeah. I'd like to add a concern.

When you put together a plan for the City of Philadelphia for energy efficiency, a lot of people want to put very strict cost-effectiveness, you know, for obvious reasons, criteria on activities.

And my caveat would be sometimes -- that you had need to allow some funding for education in which -- for programs in which the values are there and you can sort of know they're there but you can't calculate them.

The energy savings in school that happen you can calculate, you can track those savings.

There are some savings you can track, but the value of the education is going to be beyond the actual immediate measurable energy savings, so you need to be sure that there's a mechanism for allowing programs, that

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you don't put yourself in a straight jacket that you can't do programs unless they're immediately cost-effective.

COUNCILWOMAN REYNOLDS-BROWN: Councilman Bill Greenlee.

COUNCILMAN GREENLEE: Thank you, Madam Chair.

Very quickly, I was actually going to ask the same question about the funding that you, unfortunately, ran out of.

But, just quickly, I want to say that I certainly agree that educating children early about this is important. They do seem to pick things up a log quicker when you have the -- I guess I relate it to computers.

As somebody who didn't work with computers, I still haven't figured 'em out, but kids seems to be a heck of a lot ahead of me and a heck of lot of other adults. So I think

it's a great idea.

And is there any prospect in the future that you know to get some of this funding back or somehow reestablish the green school idea?

MS. HARRIGAN: Well, yeah. I think -- I guess I've always felt -- in other places, the primary funders of this program have been the utilities. And that definitely seems like it ought to be a possibility.

COUNCILMAN GREENLEE: Have you had any discussion with them?

MS. HARRIGAN: Not lately. We did in the past, and we sort of go down the road for a while and then something would happen, but we never found out what it was.

Another possibility is, the way a the program was funded in the city of Rochester is, they were doing a major ESCO project, a capital project, improving the energy efficiency, and they actually included

green schools as -- essentially as a measure.

And they said okay, well, let's just assume green schools is going to provide a 5 percent savings for the school district. And it was difficult to measure because they were doing renovations on the school, so it was difficult to measure what the actual students were able to achieve in terms of saving energy. But they kept track of what they did and were able to justify, yeah, we figure we're saving 5 percent.

So that's another possible mechanism, is through your capital improvement projects for the school districts. It's peanuts compared to the total cost of those projects.

COUNCILMAN GREENLEE: Thank you.

COUNCILWOMAN REYNOLDS-BROWN: Well, we thank you again for your testimony as we move to sort of frame

out our next steps. Thank you for making the trip.

MS. HARRIGAN: Sure.

COUNCILWOMAN REYNOLDS-BROWN: Okay. Our next panel, please, and forward: Lorna Rosenberg, with the Environmental Protection Agency; Sara Sweeney, with the Blackney Hayes Architects; and Jill Kowalski, with the Delaware Valley Green Building Council.

(Witnesses come forward.)

UNIDENTIFIED SPEAKER: Jill Kowalski is not here; we will be representing the Delaware Valley Green Building Council as well.

COUNCILWOMAN REYNOLDS-BROWN: Great. Please state your name for the record and proceed with your testimony.

MS. SWEENEY: My name is Sara Sweeney, with the Delaware Valley Green Council Green Schools Work Group and also with Blackny Hayes

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Architects.

First, I would like to read a letter that was sent to us by the United States Green Building Council, their school sector manager. They will also be mailing an original copy, and then I'll also offer some testimony of my own.

"Dear Philadelphia City Council Committee on the Environment: Green schools are not only on the minds of Philadelphia policy-makers. Throughout the country and even in the halls of Congress, the Green School movement is growing and gathering momentum.

"We cannot be in Philadelphia today, as we are at the inaugural event for the newly-formed Green Schools Caucus, founded by Representatives Darlene Hooly of Oregon, Michael McCall of Texas, and Jim Matheson of Utah. The aim of the caucus is to raise awareness among

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fellow law-makers about how sustainably-designed schools lower building energy and maintenance costs and bolster student learning and health. The caucus intends to introduce its first bills on green schools early next year.

"Around the country, more than 70 K-through-12 buildings have earned the US Green Building Council's Leadership and Energy and Environmental Design (LEED) certification, a consensus-based rating system that provides third-party verification for green buildings based on achievements in categories like energy efficiency, water efficiency, and indoor environmental quality.

"One of the caucus's first efforts will be ensuring lawmakers keep a provision in the House's passed energy bill, HR-3221, which would require the Energy Department and

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other federal agencies to study how green schools affect students' health and learning.

"A 2006 study sponsored by the American Federation of Teachers and US GVC found that building green can save a typical school about $100,000 annually in direct costs, enough to pay back the average 2 percent increase in construction costs within a few years. Even so, a report by McGraw Hill found that school administrators listed higher construction costs among their top reasons for not building greener classrooms. Members of the caucus hope to change that mindset by funding research that would quantify the benefits of going green.

"We commend the School District of Philadelphia on its commitment to green schools with the construction of the School of the Future, a certified LEED gold

facility, and the John Barry School, which is registered as a LEED project. We encourage the School District and City Council to develop as many green schools as possible in Philadelphia, even with their existing building stock.

"Existing schools can more energy-efficient and healthier through the implementation of policies and actions that focus on lighting upgrades, consistent maintenance of HVAC equipment, and green cleaning, just as an example.

"We applaud your efforts to be a leader in the upgrading of your existing schools and offer our support to help you accomplish the vision for Philadelphia's public school children and staff."

And this letter is signed, Rachael Gutter, the School Sector Manager, and Jason Hartke, the Advocacy Director. Both with the

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United States Green Building Council.

COUNCILWOMAN REYNOLDS-BROWN: Thank you for your testimony.

Let me please acknowledge the Chair of the Environmental Committee, Councilman Jim Kenney, who has been recognized by Philadelphia Style as our green champion for the City of Philadelphia, and he's one of us. It's a great article, Jim Kenney.

To Liz Robinson, if you could please remember to forward to the Chair a copy of the testimony of your presentation.

Thank you, Sara Sweeney.

MS. SWEENEY: Yes.

COUNCILWOMAN REYNOLDS-BROWN: Give me a quick restatement on the legislation you say that's in the House?

MS. SWEENEY: Today -- I'll read the first paragraph again.

The two members of the United States: "We cannot be in Philadelphia

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today, as we are at the inaugural event for the newly-formed Greens Schools Caucus, founded by Representative Darlene Hooly of Oregon, Michael McCall of Texas, and Jim Matheson of Utah.

"The aim of the caucus is to raise awareness amongst fellow lawmakers about how sustainably designed schools lower building energy and maintenance costs and bolster student learning and health."

COUNCILWOMAN REYNOLDS-BROWN: Oh, okay.

MS. SWEENEY: So it is starting to become federal legislation moving towards that plan.

COUNCILWOMAN REYNOLDS-BROWN: It's great to know that we have persons in leadership who are carrying a banner on this important effort as well.

MS. SWEENEY: Correct.

COUNCILWOMAN REYNOLDS-BROWN:

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Any questions for this witness, please?

(No questions.)

COUNCILWOMAN REYNOLDS-BROWN: Very well.

MS. SWEENEY: If I may, I wanted to actually offer a few other things of testimony for ourselves in the Green Schools --

COUNCILWOMAN REYNOLDS-BROWN: Surely.

MS. SWEENEY: Okay.

COUNCILWOMAN REYNOLDS-BROWN: Now is the time.

MS. SWEENEY: Great.

Well, one thing I wanted to -- earlier, when Carol Fudge was up here, she mentioned Europe and the fact that other countries are far ahead of us in terms of green design and energy-efficient building.

I wanted to elaborate on that a little bit more. One reason that Europe is so far ahead of us is that

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after World War II, Europe was absolutely devastated back in the '40s. They had little to no oil, coal, or natural resources to heat and cool their buildings. They had a hard time fining light bulbs to, you know, light the buildings where people working to rebuild their economies.

So they really needed to start exploring energy-efficient means at a much earlier time than we did, here in the United States, because after World War II, we were obviously the richest country in the world, we had an abundance oil, gas, and coal, and we built our buildings much differently.

We thought that we could build our buildings, seal them up. And heat and cool them efficiently with oil, coal, gas; whereas, in Europe, they thought, We need to look at how we can naturally ventilate buildings, be much more energy-efficient, and so forth.

And so I think that's one

thing to consider, why other parts of world are far ahead of the United States in those efforts. And I think that we are beginning to catch up.

I also just wanted to point out that building green -- in general, green building is somewhat of a catch phrase used nowadays, but it really is a different way of building than how we conventionally build today. And we need to start considering that and the fact that buildings use more energy than transportation and industry, which was a part of the PowerPoints in the previous testimony.

And, in my opinion, really, buildings demand that kind of energy. And just to give you a quick aside on that, we were sitting back here and did a quick calculation of how much energy this room is actually using in terms of lighting. We figured out that right now, with the amount of light bulbs, which we figured were

probably 300 watts a pop, incandescent bulbs, that you're probably using about 180 kilowatts of energy per hour, which then translate into 1800 kilowatts per day, or 540,000 kilowatts per year. I multiplied that by 300 to account for weekends and so forth.

If you installed compact fluorescent or LED lights in this room, you would reduce that energy usage to about 45 kilowatts per hour, 450 kilowatts per day, and 135,000 kilowatts per year. So you could reduce the energy draw just in this room alone by almost 400,000 kilowatts.

If you start looking at the entire building, all City buildings, and you could start to think about the incremental changes that could be made in energy usage, because, in reality, the buildings that we have, both existing and new, the buildings built

are demanding that energy be -- you know, that energy be produced for them to operate.

So the more energy-efficient we can build our building, the less demand that we will be putting on our, you know, power plants to provide this energy.

And I think that -- oh, one other point, too. I think, also, we need to consider, with green building is considered larger impacts on the whole, that the true cost of building a building in terms of the wholistic impact on the environment. A lot of building products, for example, are petroleum-based or extraction of materials for building buildings may have a larger impact on an environment in terms of wild life, trees, and so forth, and we have to consider those impacts aw well, because it's not just about us; it's about all of us together.

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So with that, I will turn it over to Lorna.

COUNCILWOMAN REYNOLDS-BROWN: Thank you. Please state your name for the record and proceed with your testimony.

MS. ROSENBERG: My name is Lorna Rosenberg. I'm the Green Buildings Program Manager for the US Environmental Protection Agency, Region III, Philadelphia.

I just wanted to add to what Sara said in terms of the lighting in this room: Not only is there a savings from using less electricity and a savings of the electricity itself, but the maintenance costs of the fact that the bulbs will last up to three to five years in use once they're put up, compact fluorescents, that you have a lower maintenance cost of people that have to go up there and switch out those bulbs. So it saves wear and tear on your staff here that

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have to maintain this beautiful building.

I wanted to read a statement that I prepared on behalf of the US EPA, which says the following:

Dear Councilwoman Reynolds-Brown: Buildings provide us with a shelter from the natural world and give us a place to work, play, nurture, and learn. However, this happens with significant impact on the natural environment, human health, and the economy.

In their construction and operations, buildings use 39 percent of all energy, 12 percent of all total water consumption, 68 percent of all total electric consumption, and 38 percent of the carbon dioxide emissions.

Environment impacts from the building environment include biodiversity and ecosystems, air and water quality, reduction of waste

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streams, and indoor environmental quality.

High-performing building can contribute to the mitigation of these impacts by creating healthier and more resource=efficient models of construction, renovation operation, maintenance, and demolition.

Research and experience increasingly demonstrate that when buildings are designed and operated with their life cycle impacts in mind, they can great environmental, as well as economic and social, benefits.

The EPA promotes energy efficiency and renewable energy, water stewardship, environmentally-preferable building materials and specifications, water reduction, toxics reduction, healthy indoor environments, and smart-growth sustainable development through various regulatory efforts in cutting-edge voluntary and

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informational programs.

In order to maintenance leadership in environmental protection, the EPA must be an example. Through sustainable design, construction, and operation facilities, the agency models responsible environmental behavior, which contributes to the green building framework being adopted by the building industry nationwide.

The EPA continuously works to improve the environmental performance of its leased and existing buildings by focusing on energy, water, and resource conservation whenever possible.

Beginning in 2006, EPA required that newly-initiated projects major=building construction projects achieve LEED gold standard -- you've heard all about LEED, so I don't need to explain that.

EPA requires that other

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sustainable features for its new major-building acquisitions include the Energy Star Building certification, specific water conservation measures, resource conservation, recycling, and use of sustainable building materials and measures to protect indoor air quality.

Currently, eight EPA facilities have acquired, or are striving for, LEED certification, and many others are actively pursuing green building principles.

Nationally, EPA sees its role as a facilitator, accelerating the transformation of the building marketplace toward one where green buildings are the norm. We hope to accomplish this through scientific research, partnering with standards-setting organizations, and key building professionals as, well as education of all consumers about the

benefits and opportunities resulting from green buildings. Organizations that are working toward making green buildings the norm share the same vision as EPA.

EPA does not take an agency position on particular legislation, funding measures, or specific local proposals that City Council or the School District may be considering. However, we fully support the public sector's movement toward green building technology. We believe that large urban school districts such as Philadelphia can teach by example in this area.

Across the nation, more than 53 million children and about 6 million adults spend a significant portion of their days in public and private school buildings. In the past five years, green schools, many of which are LEED-certified, have arrived on the scene as new construction or

major-renovation projects that result in improved student academic performance (that's up to 25 percent increase in standardized test scores from being in a green school), increased attendance, reduced operating costs, and increased teacher satisfaction. That's less complaints from teacher unions and such.

The School District of Philadelphia has two LEED projects: The school of the Future and the Commodore John Barry School, with certification pending. These two schools will lessen the environmental impacts to responsible approaches to site management, reduced demand on municipal infrastructure, and recycling during and after construction.

In their operation, they will provide a healthy indoor environment, while decreasing reliance on fossil fuels, thus reducing carbon dioxide

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emissions and other forms of harmful pollution. On the average, the School of the Future and the Barry School will use 33 percent less energy, save 32 percent more water, and reduce solid waste during construction by up to 74 percent.

In a recent study, many schools reported at least one unsatisfactory environmental condition, such as poor ventilation, noise control, indoor air quality, heating or lighting problems, poor physical security and safety hazards. Conditions such as these could pose short-term and long-term threats to children's health and productivity.

In Philadelphia, there are many existing schools that fall into this category. Finding ways to green these existing schools may provide students and staff with a safe and healthy school environment. A learning environment with ample

lighting, high-quality acoustics, and air that is healthy to breathe results in greater student achievement, higher attendance, and more contented staff.

As the largest school district in Southeast Pennsylvania, we support Philadelphia City Council and the School District's goals of having as many high-performing green schools as possible. An effort such as this will enhance the educational, environmental, and economic condition not only of Philadelphia but of the entire region.

Respectfully submitted, Lorna Rosenberg, Green Building Program Manager.

COUNCILWOMAN REYNOLDS-BROWN: Thank you for your testimony.

Any questions or comments for these witnesses?

(No questions.)

COUNCILWOMAN REYNOLDS-BROWN: We will receive copies of your

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testimonies from the both of you?

MS. ROSENBERG: You have one.

MS. SWEENEY: The letter from the United States Green Building Council, I can leave a copy here with their mailing, an original copy.

COUNCILWOMAN REYNOLDS-BROWN: Please.

MS. SWEENEY: And then my testimony is sort of haphazard notes, which I'd be glad to leave with you.

COUNCILWOMAN REYNOLDS-BROWN: Yes. So thank you both, ladies, and, as I said, this is just a first step as we gather information that instructs the steps after this.

Thank you very much for your time.

If we could please ask our last and final panelist, Lance Haver, City Office of the Consumer Advocate, to come forward and offer your testimony.

(Witness comes forward.)

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COUNCILWOMAN REYNOLDS-BROWN: Please. Good afternoon.

MR. HAVER: Good afternoon, Councilwoman. Thank you very much.

COUNCILWOMAN REYNOLDS-BROWN: You're welcome.

MR. HAVER: My name is Lance Haver. I'm the Director of the Mayor's Office of Consumer Affairs, and I really appreciate this opportunity to testify. I'll be brief 'cause I know it's been a long day for most of you.

I recognize that the School District of Philadelphia has been in the vanguard of building green buildings. My purpose in testifying is to urge the School District to use its collective buildings and school buses to open the door for new thinking and new technologies.

While I, like almost everyone else, am aware of the financial challenges that face our schools, I

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would urge the School District to seek a grant to cover the cost of implementing a weatherization conservation program for its older schools. I would urge such a program to reach out to schools of engineering, insulation contractors, and energy-conservation companies with requests for proposals to develop new cost-effective techniques to conserve energy, protect the environment, and, of course, save money.

In essence, the School District of Philadelphia could undertake a national search for the best and most appropriate technologies and allow its buildings to be used to prove that investments in weatherization conservation save money.

If, as a result of the competition, there were new technologies developed, they could be used to weatherize other school

buildings. Perhaps with appropriate planning, the School District could be able to own a portion of the technology developed and offer it to other school districts across the country. This may develop an additional revenue stream for the School District.

In a similar manner, the School District could use its fleet of school buses to promote bio diesel production in the City of Philadelphia. It is well established that existing buses can run on a mixture of bio and petro diesel without any modifications.

By using state grant dollars and its purchasing power, the School District could help grow a Philadelphia business, adding much-needed jobs and tax revenues to the City while cutting down on pollution.

I recognize that such

activities are not a part of the core function of the School District, but I believe we must recognize that if we do nothing to conserve energy or develop businesses, the rise in cost of energy will take more and more away from the School District's core functions.

We must make every attempt to see our problems as opportunities for new ideas and business growth whenever possible. And I believe the rising costs for fuels provides such an opportunity.

Again, thank you for the opportunity.

COUNCILWOMAN REYNOLDS-BROWN: Sure, sure.

Do you know of other locations in the country where either one of your recommendations are in play -- for example, the mixture of bio and petro diesel?

MR. HAVER: A number of school

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districts are using that. The difference here is, we are such a large school district that we could actually use the -- the negotiation will buy the bio diesel from "X Company" If "X Company" were located in the City of Philadelphia.

The smaller suburban school districts don't have the buying power that we have and are not in a position to negotiate.

We also have (indiscernible) diesel, which is developing bio diesel here in the City. We have a number of opportunities because of our size that smaller suburban school districts don't.

In addition, the State has a grant so that the cost difference between petro diesel and bio diesel would be absorbed by the State. There would be no additional cost to the taxpayers of Philadelphia.

COUNCILWOMAN REYNOLDS-BROWN:

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Mm-hmm.

MR. HAVER: The situation with the schools, much of the grant money now for research and development is for renewable fuels and not for conservation and weatherization.

COUNCILWOMAN REYNOLDS-BROWN: I see, I see.

MR. HAVER: Now, I will tell you that I believe that the School District is doing ab excellent job on this new construction, and I think that's true and undisputed.

The problem is, our schools are old and there's very little in the way of research and development dollars for new types of technology for weatherization and insulation.

If you think about it for a second, I think you will realize that most of the research goes into solar panels or hydrogen fuel cells or things like that, and very little goes into ways of sealing drafts and trying

to seal buildings and developing new types of windows.

If we could generate the interest on a national level for engineering schools to look at that, then we would become a place that people would want to develop technologies.

If we were smart about it and we owned 5 percent of that technology and then we sold it to 50 other cities in America that building stocks like we do, we would have an additional revenue stream.

COUNCILWOMAN REYNOLDS-BROWN: You've completely thought this through. I mean, you've looked into the magic ball and have given us the solution.

MR. HAVER: That's kind of you.

COUNCILWOMAN REYNOLDS-BROWN: We thank you for your important testimony and for the recommendations

that you've offered that will for sure be considered as part of the next steps.

MR. HAVER: Thank you very much for time.

COUNCILWOMAN REYNOLDS-BROWN: Any other questions or comments?

Councilwoman Jannie Blackwell?

COUNCILWOMAN BLACKWELL: I, too, would like to say thank you for the excellent testimony.

MR. HAVER: Thank you, Councilwoman.

COUNCILWOMAN REYNOLDS-BROWN: We thank all of you for your interest and your expertise and for coming today to tell us how to do better when it comes to growing a green city. And you can anticipate further notice from our office on what the exact next steps will be based on all of the testimony.

So this is step one.

Thank you very, very much.

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The joint Committee on Education and environment is adjourned.

(Proceedings end at 2:40 p.m.)

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C E R T I F I C A T E

I HEREBY CERTIFY that the proceedings of the City of Philadelphia Council Committee on Education are contained fully and accurately in the stenographic notes taken by me on Wednesday, December 5, 2007, and that this is a true and correct statement of same.

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JOSEPHINE CARDILLO
Registered Professional Reporter

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