



Testimony of Candace Carmon and George Jenkins
Senate Urban Affairs and Housing Committee
March 18, 2010

Good morning Mr. Chairman and Ms. Chairwoman, members of the Senate Urban Affairs and Housing Committee, and guests. We greatly appreciate the opportunity to testify before you today.

Each year Youthbuild Philadelphia serves approximately 200 high school dropouts between the ages of 18 and 21 all interested in attaining their high school diploma and a certification in one of our three available vocation program which include Building Trades, Information Technology and Business Administration, and Healthcare. Today we will be addressing how our current Building Trades program is working to contribute to urban modernization not only in training but in program outcomes. Building Trades students are customarily responsible for completing a home rehabilitation project. This year we have assigned a team of students and Mr. Jenkins to work on a home that will include the installation of green and energy efficient technologies.

I am Candace Carmon, the Director of Vocational Programming for Youthbuild Philadelphia Charter School. With me is George Jenkins, one of our Building Trades instructors. As Director of Vocational Programming I am responsible for the effectiveness of our vocational training programs. It is our goal that students leave Youthbuild with not just a high school diploma, but with the skills and training necessary to compete in today's demanding and ever changing workforce. Mr. Jenkins works on the front line with the students delivering hands on and relevant training to assist us in meeting that goal.

This year the students involved in the "green team" are not only working on the property that Mr. Jenkins will describe in greater detail, but are being provided with additional training geared toward supplying them with the skills necessary to become a part of the green workforce in the city of Philadelphia. They will be learning the specifics around energy efficiency including an introduction to the science of green technologies and the importance of sustainability including the long and short term effects of energy efficiency.

In addition to internal supports which include Mr. Jenkins and a full time Green Opportunities Coordinator, Youthbuild Philadelphia has been working to partner with external training resources like the Energy Coordinating Agency to provide the students with meaningful training that will position them as key players in Philadelphia's green economy, as employees as well as informed citizens dedicated to "greening" Philadelphia.

Mr. Jenkins, will give more insight into the specifics of the project taking place at 4557 N. Uber Street, a two story 3 bed room single family row home being rehabilitated in a north Philadelphia.

I am extremely excited about the work we are doing at 4557 N. Uber. The project has a limited amount of resources so we are focusing on making our main or big ticket items green technology. Recycling twenty percent of the original building structure will help us to meet our environmental goals.

A SPF system will be installed to protect the property at the exterior, main and secondary roof,. Sprayed Polyurethane Foam is seamless, flexible and light weight. It also has an R- value of 7.14 per 1 inch thickness, enabling it to provide more thermal resistance with less material than any other type of roofing insulation.

The rough carpentry stage will consist of finger jointed engineered studs installed completely throughout the property. By using finger jointed studs, oriented strand board and box beam headers in this stage of rough construction we will save approximately 182 trees.

Our project will produce photovoltaics, which is the conversion of our natural sunlight to energy. Photovoltaic systems incur a relatively high first cost for systems which produce electricity and will provide significant environmental benefits over 20 years. PV systems improve the capacity of our local electricity distribution grid while producing electricity with out the environmental costs of air emissions, radiation, or water pollution. PV systems also produce electricity during the times we demand it the most and will allow home owners to reverse their meters to sell power. Glazed flat plate solar collectors will be installed at the roof to run a solar tankless hot water system and a solar heating system. Flat plate collectors are insulated weatherproofed boxes that contain a dark absorber plate under plastic. Heating your home with an active solar energy system can significantly reduce your fuel bills in the winter. A solar heating system will also reduce the amount of air pollution and greenhouse gasses that result from our use of fossil fuels.

Photovoltaic's will also power 80 % of the projects' radiant heating. Radiant heating systems involve supplying heat directly to the floor or to panels in the walls or ceiling. Radiant heating has a number of advantages; it's more efficient and usually more effective than forced hot air.

Weatherization plays a big role energy savings. Fiberglass windows will be installed. Less torsion and stress between glass frames in cold weather results in reduced air leakage. In the place of fiberglass insulation, we will install Spray Foam Insulation; this is non toxic and expands to about 100 times its original volume, sealing walls, floors and ceiling cavities preventing air flow.

Every day we are advancing and finding new ways to use green technology. We are committed to the use of other environmentally sound products and processes including a green plug, fiber cement board, recycled carpets, green landscaping and deck materials for our rear yard given appropriate funding and availability of materials.

Overall, YouthBuild Philadelphia's Building Trades program has made an investment in producing a workforce equipped to participate in the green economy as well as a move toward increasing the number of energy efficient properties in the city of Philadelphia.

We hope the information presented in this testimony has been helpful to you as you continue to look at and address urban modernization. We would be happy to answer any questions that the panel might have. Thank you again.