



Midtown Harrisburg Integrated Community Redevelopment



GreenWorks Charter:

- Urban redevelopment – brownfields, not greenfields
- Committed to the deployment of sustainable technologies – solar, geothermal, and wind
- Committed to sustainable development – LEED certified buildings and communities
- Focused on integrated community development
 - Smart Growth concepts that incorporate residential, commercial, retail, and academic uses
 - Re-invigoration of “walkable” live, work, play and learn neighborhoods





Key Issues:

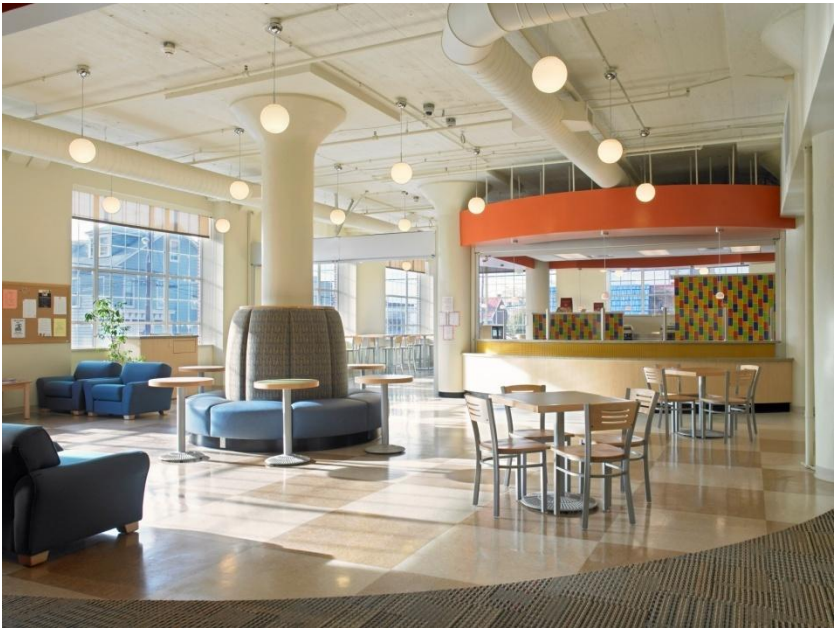
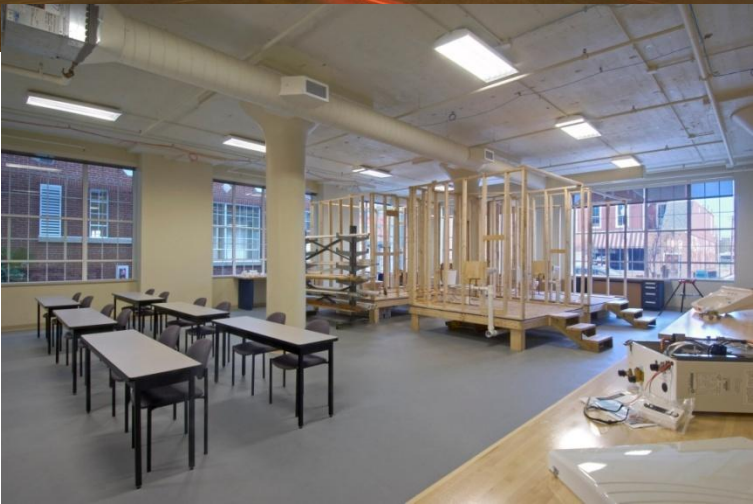
- **Anchor Tenant Development - Momentum**
- **Property Assemblage**
- **Remediation**
- **Destination Development - Amenities**
- **Safety & Security**
- **Parking**
- **Integration with Community**
- **Integrating Green into the Pro Forma**

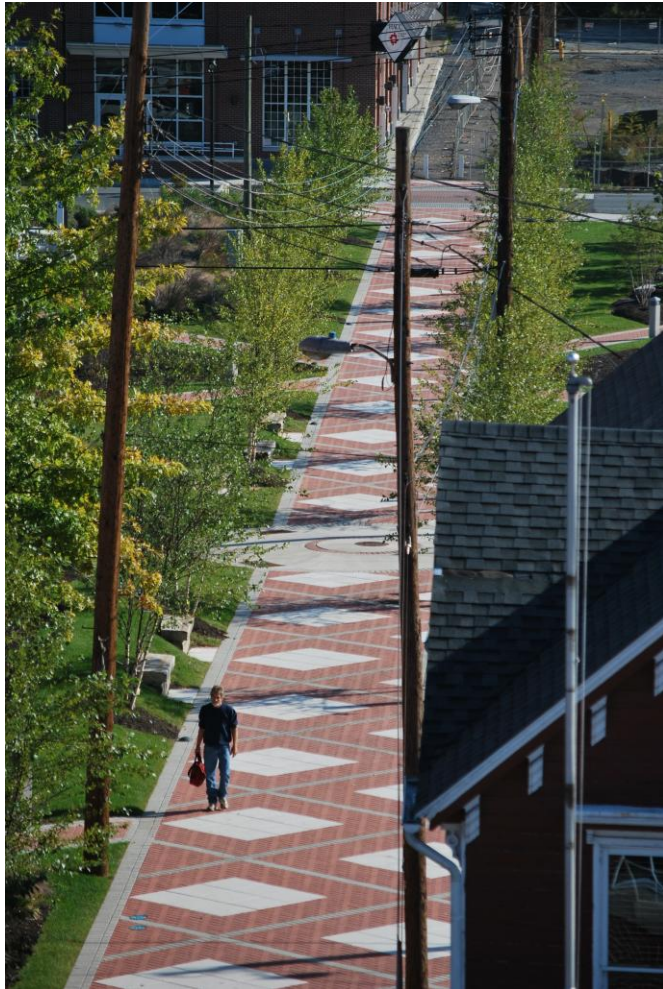
MIDTOWN MASTER PLAN – OVER 1 MILLION FT² OF NEW SPACE



PLANNED MIDTOWN EDUCATIONAL/CORPORATE/
RESIDENTIAL/RETAIL COMMUNITY

FORMER EVANGELICAL PRESS BUILDING – NOW HACC MIDTOWN II

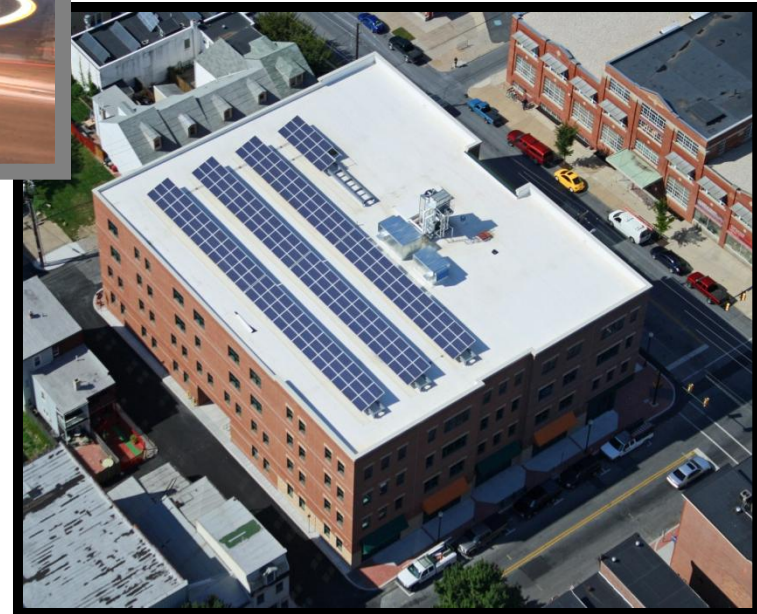




Green Space and Pedestrian Walkway

CAMPUS SQUARE BUILDING – THIRD AND REILY STREETS

- Geothermally heated and cooled
- 42 kW solar array on roof
- Gold LEED certification Pending



CAMPUS SQUARE BUILDING – ROOFTOP SOLAR ARRAY



All new buildings in Midtown Harrisburg will incorporate the latest in sustainable design and alternative energy technology. Innovative financing and public funding techniques will keep alternative energy technology installation affordable and offer significant savings to tenants for the life of the buildings.

The solar array was funded in part by a Pennsylvania Energy Development Authority grant, and will provide approximately 20% of the building's electricity needs



Evergreen Solar
42 kW
crystalline
silicon solar
array, installed
on roof of
Campus Square
Building

HACC MIDTOWN II BUILDING – ROOFTOP SOLAR ARRAY

**96 panels –
26 kW**

**260 panels –
70.2 kW**

**390 panels –
105.3 kW**

**180 panels –
48.6 kW**

**Crystalline
silicon
photovoltaic
panels will be
installed.**

**Total peak rated power – 250
kW, or approximately 34% of
the building's electricity needs**

**When completed, the array will become
the 9th largest registered in PA.**



225 kW Solar Installation HACC Midtown II Building

Net System Cost	Installed cost of solar (at \$5/W)	\$1,125,000
	State grant (\$1.80/W, 38% tax rate = \$1.12/W net)	(\$252,000)
	Federal tax credit (30%, or \$1.50/W)	(\$337,500)
	Net construction cost (amount to be financed)	\$535,500

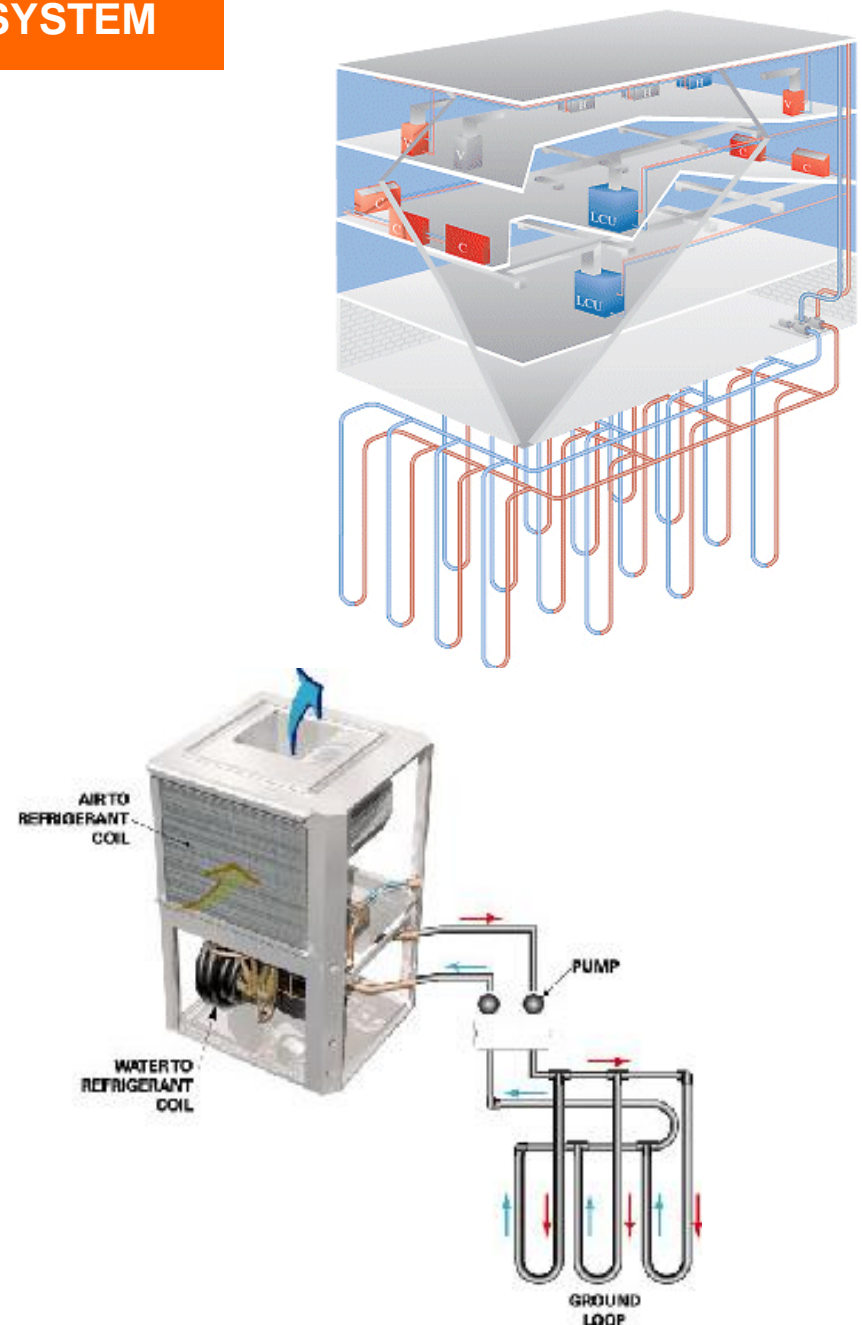
Payback Method	Financing (6% , 5-year term), annual payment	(\$124,233)
	Average annual electricity value over 1 st 5 years (at \$.127/kWh in 2010, 10% annual increases)	\$42,007
	Annual SREC value (at \$300/credit , 271 credits/year)	\$81,304

Net annual loss (\$922)

**Risks
shown in
red**

CAMPUS SQUARE BUILDING GEOTHERMAL SYSTEM

- Closed-loop ground source heat pump system
- Includes 48 geothermal wells (400 feet deep each), all drilled and located within the footprint of the building
- Utilizes the earth as a heat source or sink (transferring heat from inside the building to the earth, and vice versa)
- Eliminates the use of gas, oil, or other fossil fuels to heat and cool the building
- At 2009 energy rates, it decreases the anticipated energy cost of the building from \$1.65/sf to less than \$1.00/sf
- System payback 4.5 years at 2009 energy rates with no subsidies



Green Building Tenant Advantages:

- **Lower Cost of Expenses**
- **Lower Cost of Maintenance**
- **Happy Employees**

Green Building Landlord Advantages:

- **Marketing Advantage**
- **Future Value**

GreenWorks Redevelopment Goals:

- **Urban Revitalization**
- **Integrated Community Development
(Live, work, play)**
- **Sustainable Development – LEED
Certified Buildings and Communities**
- **Alternative Energy**
- **Educational Focus**

GreenWorks Development

