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
MIDTOWN HARRISBURG

Evangelical Press Bldg
HACC Midtown II
Third & Reily Streets
Campus Square Bldg Site

HACC Midtown I
Key Issues:

• Anchor Tenant Development - Momentum
• Property Assemblage
• Remediation
• Destination Development - Amenities
• Safety & Security
• Parking
• Integration with Community

• Integrating Green into the Pro Forma
PLANNED MIDTOWN EDUCATIONAL/CORPORATE/RESIDENTIAL/RETAIL COMMUNITY
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

GreenWorks Development
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.
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**

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

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

| Net annual loss | ($922) |

**Risks shown in red**
• 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