

NON-PROFIT FACILITIES CENTER RENEWABLE ENERGY PROJECTS

Description: SDHW & PV System Design

Location: Southeast Michigan

Cost: \$300,000

Completed: 2005



Sustainable Energy Efficiency Program for Supportive Housing

The Nonprofit Facilities Center (NFC) offers assistance to nonprofit organizations throughout the Detroit Metro area to help them maintain and upgrade their facilities. Since its inception, the NFC has promoted the benefits of energy efficiency to its client base. In 2004, the agency's director chose to expand the organization's energy vision to include renewables and green architecture with a limited test program. The success of that effort, in conjunction with the availability of new funding the following year, gave birth to the Sustainable Energy Efficiency Program for Supportive Housing.

Following an initial screening process, 8 nonprofit organizations that provide housing and support to a wide variety of clients were selected to participate. Housing facilities are a good fit for renewables because they operate around the clock. A total of 11 buildings, ranging from ranch houses to large 3 story multifunction buildings were serviced.

The organizations involved are: JARC in West Bloomfield (2 bldgs), Common Ground in Royal Oak (2 bldgs), Haven and Lighthouse PATH both in Pontiac, Vista Maria in Dearborn Heights, and in Detroit, Cass Community Social Services (2 bldgs), Holy Cross Children's Services, and Mariner's Inn. All buildings received a solar hot water system including collector panels on the roof and storage tanks in basement. Solar energy will be used to preheat the domestic hot water.

The 5 largest buildings also received the latest in photovoltaic or solar electric systems. The 450 square feet of panels on each building were manufactured in Michigan by Uni-Solar and produce 2.5 Kilowatts of electricity with peak sun light. Although most of the solar systems are on flat roofs and cannot be seen, they will help reduce utility costs for those organizations both now and far into the future.

Green Attributes

- Urban Retrofit
- Solar Domestic Water Heating
- Good Return on Investment
- Low Maintenance Equipment
- Long Life Expectancy
- Passive Heat Exchangers
- Solar Photovoltaic Systems
- Local PV Manufacturer
- Low Silicon Resource Use
- Diffuse Sunlight Energy Collection
- Vandalism Proof
- Electrical Grid Connected