

# affordably green

SELECTED RESOURCES for GREEN AFFORDABLE REHAB

## **TRAINING & INFORMATION**

### **Affordable Housing Design Advisor**

Follow the link to the *Affordable Green Academy*, <http://www.designadvisor.org/>, where you'll find film clips that describe technical and organizational issues associated with green building. The training is free but registration is required.

### **Building Science Corp.**

<http://www.buildingscience.com> provides objective, high-quality information about buildings. This resource combines building physics, systems design concepts, and an awareness of sustainability to promote the design and construction of buildings that are more durable, healthier, more sustainable and more economical than most buildings built today.

### **New Ecology, Inc.**

Resources for community-based sustainable development can be accessed at <http://www.newecology.org>

### **Sustainable Building Information System**

An international data base, which can be accessed at <http://www.sbis.info>

### **Energy Efficient Rehab Advisor**

Presents HUD's guidelines for energy efficient housing rehabilitation <http://rehabadvisor.pathnet.org/>. Includes estimates of costs and savings for many green building measures.

### **Northeast Sustainable Energy Association** <http://www.nesea.org>

**U. S. Green Building Council** <http://www.usgbc.org> The USGBC in conjunction with ASID also has a site pertaining to residential remodeling that is useful for single family home projects and can be found at <http://www.regreenprogram.org/>

### **U. S. Green Building Council New York Upstate Chapter**

<http://www.greenupstateny.org/>

## **HOME**

Capital funds – for rehab of homeowner or rental housing. Units must comply with Housing Quality Standards (HS) be occupied by households of low or very-low income for a period of 5-20 years (depending on the amount of HOME funding and program design). Information and training on the HOME program is available at

<http://www.hud.gov/offices/cpd/affordablehousing/programs/home/> CHDO – HOME funds can provide operating funds for qualified community development corporations

HOME funds are available from local jurisdictions and NYS DHCR.

### **DHCR/HTFC CAPITAL PROGRAMS & GREEN BUILDING INITIATIVE**

Funding for affordable housing includes Low Income Housing Tax Credits (LIHTC), the Housing Trust Fund, and HOME <http://www.dhcr.state.ny.us/Funding/>

Through the Green Building Initiative and the Energy Efficiency Initiative funding preference is provided to projects that meet the requirements described in the Green Building Criteria Reference Manual and specified energy performance standards. Additional funding is also available for LIHTC, HTF and HOME projects.

### **HISTORIC PRESERVATION TAX CREDIT PROGRAMS**

Federal tax credits in the amount of 20% of qualified rehabilitation costs are available for designated historic properties, which are rehabilitated as income producing housing. Rehab must comply with the Secretary of the Interior's Standards for Treatment of Historic Properties <http://www.nps.gov/history/hps/tps/standguide/> An additional credit for State Taxes is available for historic properties located in qualified low income area, which can be located through the GIS information at <http://nysparks.state.ny.us/shpo/online-tools/disclaimer.aspx?pgm=gis> Additional information on State and Federal credits can be accessed at <http://nysparks.state.ny.us/shpo/tax-credit-programs/>

### **ENTERPRISE GREEN COMMUNITIES**

Enterprise Green Communities provides grants, financing, tax-credit equity and technical assistance to developers for creating low-income housing according to their specific Green criteria. For more, see the <http://www.greencommunitiesonline.org/>

### **NYSERDA**

Multifamily Performance Program – temporarily suspended – check for updates at <http://www.getenergysmart.org/MultiFamilyHomes/default.aspx>

Solar Electric Incentive Program

Residential – \$1.75 per watt up to a maximum of 5 kW per site/meter, and not to exceed 50% of the total installed system costs.

Commercial – \$1.75 per watt up to a maximum of 50 kW per site/meter, and not to exceed 50% of the total installed system costs.

Not-For-Profit - \$1.75 per watt up to a maximum of 25 kW per site/meter, and not to exceed 50% of the total installed system costs.

Check for rules and updates at <http://www.nyserda.org/funding/1050pon.asp>

New Construction Program (some substantial rehab qualifies)  
Customers of specified electric utilities are eligible for technical assistance and financial support for cost effective electric-efficiency measures  
Program information is available at <http://www.nyserda.org/funding/1501pon.asp>

## **NEW ECOLOGY PRESENTATION LINKS**

### **Morning Plenary**

US Energy Information Administration: [www.eia.doe.gov](http://www.eia.doe.gov)  
The Science of 350: [www.350.org](http://www.350.org)  
Advanced Buildings: [www.advancedbuildings.net](http://www.advancedbuildings.net)  
Home Energy – Advancing Home Performance: [www.homeenergy.org](http://www.homeenergy.org)  
Utility Module- Simple Managing Your Utilities: [www.utilitymodule.com](http://www.utilitymodule.com)  
Energy Star: [www.energystar.gov](http://www.energystar.gov)  
WegoWise – Measuring Building Performance: [www.wegowise.com](http://www.wegowise.com)  
Weather Underground: [www.weatherunderground.com](http://www.weatherunderground.com)  
National Grid: [www.nationalgridus.com](http://www.nationalgridus.com)  
Massachusetts Technology Collaborative – Harnessing the Power of Innovation:  
[www.masstech.org](http://www.masstech.org)

### **Afternoon Case Studies**

Homeowners Rehab, Inc. – Community Development Corporation:  
[www.homeownersrehab.org](http://www.homeownersrehab.org)  
Next Step Living – Residential Energy Efficiency Company: [www.nextsteplivinginc.com](http://www.nextsteplivinginc.com)  
Boston Connects Inc. – Boston Redevelopment Authority:  
[www.bostonredevelopmenetauthority.org](http://www.bostonredevelopmenetauthority.org)  
Massachusetts Energy Consumers Alliance: [www.massenergy.com](http://www.massenergy.com)  
Action for Boston Community Development, Inc. – Providing services to residents eligible for low-income programs: [www.bostonabcd.org](http://www.bostonabcd.org)

## **DEFINITIONS**

**BTU (British Thermal Unit):** A BTU measures how much energy the building is using. It is approximately the amount of energy needed to heat one pound of water one degree Fahrenheit.

**HDD (Heating Degree Day):** A heating degree day, based on daily temperature observations, is designed to reflect the demand for energy needed to heat a home. In other words, it is a way to quantify the amount of heating buildings in a particular location need over a certain period of time (e.g. a particular month or year).

To find the day's average temperature, add the day's high and low temperatures and divide by two.

- If the number is above 65, there are no heating degree days that day.
- If the number is less than 65, subtract it from 65 to find the number of heating degree days.

**REM Rate Model:** Software that is designed to help with critical energy analysis for residential structures. The model produces a home energy rating report based on the RESNET National HERS Technical Standards, and has an export/archive file feature which allows HERS providers to maintain a historical database of ratings.

**HERS Rating:** The HERS (Home Energy Rating System) rating is an evaluation of the energy efficiency of a home compared to a computer simulated reference house of similar size and shape that meets the 2006 International Energy Conservation Code (this is subject to change as the Code is updated). This system was established by the Residential Energy Services Network (RESNET). In New York State, The HERS rating results in a score between 0 and 100 (100 represents zero energy use). Energy Star Labeled homes must achieve a HERS score of at least an 85.

**Net Present Value (NPV):** The Net Present Value is the value of future cash flows in today's terms. NPV is used to analyze the profitability of an investment or project.

**Simple Payback:** An energy investment's simple payback period is the amount of time it will take to recover the initial investment in energy savings. To find the simple payback, divide the initial installed cost by the annual energy cost savings. For example, an energy conservation measure that costs \$5,000 and saves \$2,500 per year has a simple payback of 2 years (\$5000 divided by \$2500).

## **RESOURCE TEAM**

Ed Connelly, New Ecology— [connelly@newecology.org](mailto:connelly@newecology.org)

Alison Corwin, New Ecology— [corwin@newecology.org](mailto:corwin@newecology.org)

Kathy Dorgan, Dorgan Architecture & Planning— [dorgan@kdorgan.net](mailto:dorgan@kdorgan.net)

Sherise Gilmore – Neighborhood Preservation Coalition— [s.gilmore@npcnys.org](mailto:s.gilmore@npcnys.org)

Christine Hmiel, Neighborhood Preservation Coalition— [c.hmiel@npcnys.org](mailto:c.hmiel@npcnys.org)