



Maryland Green Registry MEMBER

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

Habitat for Humanity of the Chesapeake

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www.habitatchesapeake.org

Nonprofit

Member since September 2010

Management and Leadership

Environmental Policy Statement

The mission of Habitat for Humanity is to build decent houses for affordable homeownership, with the vision of eliminating poverty housing throughout the world. Habitat for Humanity of the Chesapeake is mindful of its resource consumption because waste detracts from our ability to meet our mission and pollutes the environment that surrounds all of us. HFHC educates staff, volunteers, and partner families about their effects on each other, the organization, and the environment. HFHC strives to model ecologically sound construction practices for ourselves and for other affiliates nationwide. We review operating expenses and building practices regularly in order to better serve our mission and reduce our impacts on the environment.

Environmentally Preferable Products and Services

In 2009, Habitat for Humanity of the Chesapeake committed to build all of our houses to Energy Star standards. More than 20 of our houses have been Energy Star certified. All of our houses undergo blower door and duct blaster testing, as well as Thermal Bypass (Thermal Enclosure System) Checklist inspections. We install Energy Star windows, refrigerators, and exhaust fans in all houses. We also use low-VOC paint and provide CFLs. Third-party certification using the Home Energy Rating System (HERS) ensures our compliance and challenges us to build higher performing housing. In fiscal year 2010, we completed construction on 33 houses. In fiscal year 2011, we will build 26 new units on previously developed lots and rehabilitate 24 abandoned units. By 2013, we hope to be completing close to 100 houses annually.

In all HFHC houses, low-flow fixtures are standard. This includes bathroom and kitchen faucets, toilets, and showerheads. When dishwashers are installed, they are Energy Star certified. We never install irrigation systems, but, when space is available, we plant native trees. When our construction involves disturbing the soil on a site, we implement best practices for reducing runoff and erosion, thus facilitating infiltration.

Habitat for Humanity of the Chesapeake's mandatory homeowner education curriculum and Homeowner Handbook also cover green building features, home maintenance, and healthy housing habits. By providing new homeowners with a solid educational curriculum and well-built houses in neighborhoods with other Habitat homeowners, HFHC is promoting sustainable development in Anne Arundel County and the Baltimore region.

HFHC's ReStores are retail stores that sell donated household items which might otherwise end up in landfills. Proceeds go back to HFHC to build more homes.

Environmentally Preferable Purchasing

All contracts with subcontractors contain language that holds them to the Energy Star standards that HFHC strives to meet. For example, drywall contractors are required to caulk or glue drywall to top and bottom plates as well as caulk or glue drywall to the framing surrounding windows and doors. HVAC contractors are required to do Air Conditioning Contractors of America (ACCA) Manual J calculations to properly size the system for the most energy efficient and cost effective units. Contractors must apply mastic to all joints in ductwork. All of these practices are required by Energy Star and they all contribute to higher performing housing for our homeowners.

HFHC receives Energy Star appliances from Whirlpool and low-flow fixtures from Kohler, which we install in all of the houses we build. HFHC also receives low-VOC paint from Valspar for our houses.

Waste

Solid Waste Reduction and Reuse

On-site, staff and volunteers build houses on previously developed land and rehabilitate vacant row houses. We use as much salvaged material as possible and work with many local companies. We are committed to quality craftsmanship and building in order to provide durable and efficient homes for our homeowners.

The main office reduces paper usage by encouraging employees to share files on the electronic network, using electronic newsletters to reach out to volunteers, and purchasing Forest Stewardship Council (FSC) certified office paper. The office has reduced its consumption of material goods by furnishing its space with donated office furniture and some donated equipment.

Of course, our ReStores also reduce resource consumption. They encourage customers to donate unwanted household and construction goods to be sold to other customers, thus keeping them out of the landfill a little longer and providing a valuable source of income for the affiliate. The ReStores have strong partnerships with local companies and contractors to accept unneeded building materials, which are sold at the ReStores and used in Habitat houses.

Both the Baltimore and Arundel ReStores are very profitable for the affiliate; this profit parallels their waste diversion. To get a better understanding of the materials the ReStores divert from landfills, they have come up with a formula to estimate the pounds of material moved per dollar of sales. They have estimated that each dollar spent at the ReStore buys approximately 1.38 pounds of goods. In fiscal year 2009, the ReStores' total sales figure was \$671,625.12. Assuming approximately 1.38 pounds per dollar, they diverted 926,843 pounds, or 463 tons of goods from the landfills. In FY2010, with \$765,000 in sales, they diverted 528 tons.

Recycling

Habitat for Humanity of the Chesapeake recycles all materials that are accepted by Baltimore City and in Anne Arundel County at its different locations. These materials include plastic containers, steel and aluminum cans, office paper, and cardboard boxes. Each site – the office and both ReStores – recycles about 400 pounds of material each month. Scrap metal from construction sites is given to scrap haulers.

Energy

Energy Efficiency

Habitat for Humanity of the Chesapeake underwent energy audits at its main office and at its two ReStore sites in early 2010. Baltimore Gas & Electric evaluated the 10,000 square foot office, 28,000 square foot warehouse and both 5,000 square foot ReStore retail spaces. The audits focused on lighting and HVAC efficiency because they each account for about 40% of the average commercial building's electric bill.

The energy audit found that our new office space was already efficient: T8 fluorescent lighting was installed throughout and the HVAC system is new. The warehouse's metal halide lights were already on one motion sensor, but they have since been divided into zones.

The audit also found that the ReStores were using old, inefficient fluorescent bulbs. BGE estimated that the Baltimore store's lighting was drawing 16,980 watts, totaling 39,989 kWh with an annual lighting bill of \$5,998.36. BGE's proposed upgrade drew 8,145 watts, totaling 18,951 kWh – \$2,842.63 annually. The Arundel ReStore was in a similar situation. In early 2010, Habitat for Humanity of the Chesapeake upgraded the lighting at both ReStores, according to BGE's suggestions. In May 2009, the Baltimore ReStore's electric bill was \$718.37. In May 2010, after the T8 lighting upgrade, their bill was \$417.76. That's an actual 42% decrease in electricity consumption for the Baltimore ReStore.

At Habitat for Humanity of the Chesapeake, we educate and train our staff and volunteers in the techniques needed to build tight, well-insulated, high-performing houses. We continue to assess our building practices so that our homes remain simple, decent, and affordable and so that we can continue to serve more families every year.



Help build a greener, more sustainable Maryland through voluntary practices that reduce environmental impacts and save money.

Learn more at www.green.maryland.gov/registry

