

# Buildings

## DEFINITION/DESCRIPTION

Improving the efficiency of the buildings is one of the most effective ways to reduce energy, water usage. In Baltimore, buildings generate almost 80% of the city's greenhouse gas emissions. When buildings are designed properly, energy is saved from the beginning and problems and costs are lessened down the road. And, when there is an emphasis on hiring locally, those who do the work are familiar with our building stock and climate.

## CURRENT STATUS

City government has energy goal reductions for city buildings and there is a citywide goal to reduce greenhouse gases 15% by 2020, using a 2010 baseline. Low-interest loans to small business and nonprofits have been used to finance energy upgrades to improve lighting efficiency, replace old "energy hog" boilers, hot water heaters and HVAC equipment and convert to efficient kitchen appliances. Over the last four years, millions of dollars of grant funding has been made available for energy upgrades to nonprofits serving the poor. And, for income-eligible families, the City delivers weatherization services and services for roofing, heating systems and healthy home improvements. The City and its partners are working to make renewable energy available to low income residents. Solar energy on rooftops can help create jobs, reduce air pollution harmful to public health and avoid greenhouse gas emissions.

## EQUITY INDICATORS

The lack of energy efficient multifamily housing has consequences for low-income families and our communities. When families with limited financial means are saddled with high energy bills that they cannot afford, they face the prospect of losing utility services or, worse, being evicted from their homes. To the extent that high energy costs drive up building operating expenses, building owners have limited means to invest in their properties while keeping rents affordable, threatening the continued availability of good quality affordable housing. Residents and owners of affordable multifamily buildings should have equitable access to the resources and the support they need to improve building efficiency.

## STRATEGIES

### 1. Promote and advance building energy and water efficiency and renewable energy in commercial, residential and institutional buildings.

**Action 1** - Continue and expand education and outreach to commercial and residential occupants and owners to bring awareness about rebates, and behavior change techniques related to water and energy efficiency.

**Action 2** - Develop programs to retrofit affordable housing units into energy and water efficient units: research wall systems used in affordable, high-performance housing.

**Action 3** - Continue to develop solar projects on city-owned property and projects that send solar energy to city buildings; continue to develop and expand financing models to make solar more accessible to low-income customers.

**Action 4:** Promote the use of PACE financing to large building owners to promote energy upgrades.

**2. Develop and adopt an energy and water use information disclosure ordinance requiring energy and water users to disclose consumption levels.**

**Action 1** - Create residential disclosure for energy and water use at time of sale or rental.

**Action - 2** - Develop a commercial benchmarking and disclosure ordinance for yearly energy and water use.

**Action - 3**

**3. Create and adopt programs and codes for promoting efficiency in existing, new and renovated buildings.**

**Action 1** - Adopt IC700 residential green building codes for new construction and major rehabilitation.

**Action 2** - Create a utility sponsored citywide water savers rebate and incentive program.

**Action 3** -

## **METRICS FOR SUCCESS**

**Strategy 1:** Target 10% of all affordable housing developed and/or retrofitted annually as high-performance.

**Strategy 2:** Achieve 80% building energy reduction by 2050 using a 2010 baseline.

**Strategy 3:**

Qualitative Improve \_\_\_\_\_ through \_\_\_\_\_