

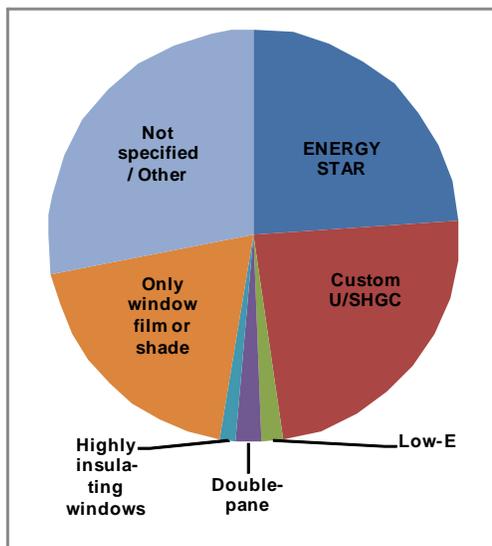
Window Energy Efficiency Incentive Programs

Many utility, state and similar programs already offer incentives for the installation of energy efficient windows and window related products. The Efficient Windows Collaborative tracks window incentive programs, and has identified over 200 individual programs that provide rebates, low-interest loans, or tax incentives for the installation of windows, window films, sun screens and/or storm windows.¹ While many of these correspond to small local programs, others are from prominent organizations. However, incentives for energy efficient windows are still not a typical measure in energy efficiency incentive programs.

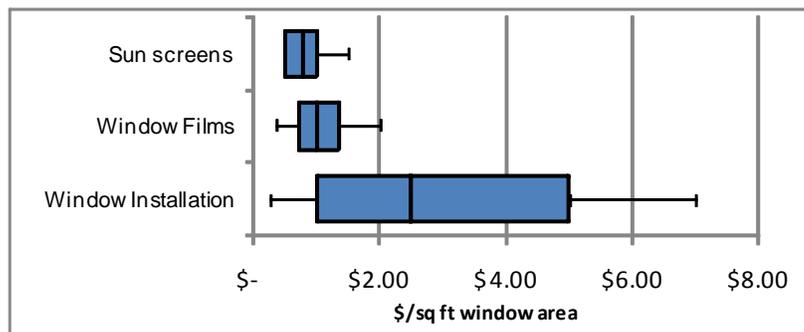
Program Types

Most window energy efficiency incentive programs are designed for residential window replacement or retrofits. In new residential construction, efficient windows are often important components of whole home programs such as ENERGY STAR for Homes. However, there are also several examples of explicit window programs for new homes and for new and existing commercial buildings. There is also a broad variety of minimum performance criteria for windows, as shown in the chart below.

Performance Criteria for Window Incentives Rebate and Loan Programs



Incentives Observed in Current Programs (only programs that offer \$/sq ft incentives)



Incentive Types

The type of incentive provided by efficiency programs usually falls into one of three categories:

- Fixed incentive per square foot of window area
- Fixed incentive per window
- Percent of actual cost with a per-home cap on incentive

The fixed incentive per square foot of window area is by far the most common incentive type. Although the median incentive level in current programs is \$2.50, incentive levels vary widely—the box plot above shows the minimum, maximum, median and quartiles of observed incentive levels in programs offering a per square foot incentive.

Performance Levels

The required performance level for incentive varies by program; however, most require a U-factor between 0.30 and 0.35. Many programs do this by requiring ENERGY STAR qualified windows, which began requiring a U-factor of 0.30 for the Northern zone and 0.35 in the South-Central zone in January 2010. Others require custom U-factor and SHGC, many of which were likely set to be more stringent than ENERGY STAR until the requirements were updated in 2010. Only three programs require a U-factor of less than 0.30, while a fourth requires triple-pane windows.

States with a Window Incentive Program

Arizona
California
Colorado
Delaware
Florida
Georgia
Hawaii
Idaho
Iowa
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Missouri
New Hampshire
New Mexico
New York
North Carolina
Ohio
Oregon
Rhode Island
South Carolina
Texas
Utah
Virginia
Washington
Wyoming

¹Information based on the EWC list of incentive and rebate programs, available at <http://www.efficientwindows.org/UtilityIncentivesWindows.pdf>