

These guidelines were approved in June 2011 by the Williams College Board of Trustees.

Background

In 1991, the College's physical plant measured 1.9 million square feet; by 2007 it had grown about 24% to 2.4 million square feet. At the same time, its energy use per square foot increased 20%. The student population stayed roughly constant but the number of faculty and staff increased from 750 to 990 full-time equivalents.

The result of these trends was a 40% rise in greenhouse gas emissions.

In January 2007, the Board of Trustees approved the College's goal to reduce greenhouse gas emissions associated with campus operations to 10% below 1990/91 levels by 2020 and the adoption of environmental sustainability as a guiding college principle.

Since January 2007, concerted efforts have significantly reduced building-related energy use and greenhouse gas emissions. The College has invested in energy conservation projects, electricity and steam metering systems, installed photovoltaic panels on the Library Shelving facility, improved control systems and operating practices, and changed to cleaner sources of fossil fuels. It also is working toward LEED certifying new building projects and adopted energy modeling, building systems commissioning, recycled waste management, and other sustainable design practices. To continue to make progress, Williams must continue to find ways to reduce energy use and to ensure that new building and renovation projects support emissions reduction goals.

About the Building Guidelines

These guidelines address situations in which construction has been deemed necessary, but the first consideration for any project is whether the College's needs could be fulfilled without new construction.

The guidelines serve three main purposes. They establish targets for the energy use and emissions associated with building programs. They offer a common understanding of how Williams' guiding principles of sustainability should be realized in construction and major renovation projects. And they document Williams' aspirations for establishing sustainability goals for major capital projects in a form that can be shared with individuals, other institutions, and the public.

This document is intended to provide general guidance. The details of implementation will be managed by those responsible for, and with the expertise relevant to, particular projects. Implementation will need to accommodate changes in technology and situations over time. The guidelines therefore do not delineate all that is and is not allowed.

The Building Guidelines

Williams aspires to incorporate principles of sustainable design into the planning and construction of new capital building and renovation projects. The potential impact on the

environment and the overall energy usage of the campus should be a central consideration in any building project.

1. Building programs should seek to reduce, or at least not increase, the College's annual energy-related (heating, cooling, and electric) emissions through energy efficiency and, where feasible the adoption of renewable energy strategies. This might be achieved, for example, through incorporating passive solar energy approaches within the building project, providing energy for the building from an on-site or off-site renewable source, or taking other campus buildings or facilities out of service.
2. The planning and design of a building or renovation program will establish energy goals for the finished structure(s), use energy modeling to project performance, and, where appropriate, will identify additional sources of energy.
3. The energy use and emissions associated with construction should be monitored and minimized. This includes emissions associated with electricity, heating fuel, equipment fuel, and all other fuels consumed during construction and demolition. When practical, construction materials with low embodied energy and other environmental impacts will be selected based upon life-cycle analysis.
4. Projects should conform to high standards of sustainable practices. All projects should seek LEED certification (or a similar industry-accepted standard) at the level of Gold, or higher when feasible. The certification level sought should be established early in the planning process. Special circumstances may dictate that a lower level be established due to inapplicability of the LEED program to a specific building type.
5. The commissioning of new or renovated spaces should be conducted in ways that advance performance goals. New spaces should be evaluated regularly to ensure that performance does not deteriorate over time.
6. The College should seek to understand and, when practicable, develop standards, metrics and associated guidelines for additional sustainability strategies and related initiatives.
7. These guidelines and any associated standards and practices should be reviewed and revised, as necessary, at least every five years.

These guidelines apply to building projects valued at \$5 million (in 2011 dollars) or more and designed after the guidelines' adoption.