Topic: Green Buildings & Energy Efficiency

Resource Type: Regulations

State: Florida Jurisdiction Type: Municipal

Municipality: County of Lake County

Year (adopted, written, etc.): Unknown

Community Type – applicable to: Urban; Suburban; Rural

Title: County of Lake Green Building &

Development Code

Document Last Updated in Database: August 27, 2016

Abstract

Lake County, Florida is located in central Florida and is named after the numerous lakes in the area. There are approximately 1,400 named and identified lakes in the County. Lake County has a population of 307,243 people and has a total area of 1,156 square miles. A total of 203 square miles (17%) of the County's area is water. The County has experienced several devastating storms, tornados and hurricanes in the past four years.

The County has an innovative green building incentive created to establish major environmental goals. The State of Florida has several green building standards, in which the County has successfully and rather seamlessly integrated those standards into the County's code. The County's green building program is placed into the County's code. The County sees green building codes as an interactive tool that will allow monitoring of environmental performance and progress. Lake County also sees its green building code as a way to booster the County's economy and to become a leader in sustainable design and improvements. For Lake County, there is no shying away from these goals as the County has managed to take the initiative in green building by leading by example.

The County mandates that all government buildings, including Lake County Board of County Commissioners (BCC), meet Florida Green Building Coalition standards for sustainable development; in addition the government is expected to carefully monitor and produce data of the sustainable improvements every year. Government buildings are also expected to report monthly water and energy use and produce an annual report that outlines Lake County's energy and water use, and greenhouse gas emission performance for all government buildings. Government building alterations undergoing a level III (per Florida building code) or greater alteration, are required to comply with Lake County's green building requirements, providing a positive cost analysis can demonstrate 100 percent pay back within ten years.

One of several unique and important characteristics of the County's code is that the County itself is required to market green buildings and encourage green development because

private sustainable projects are voluntarily. Alongside marketing sustainability, the County will offer important incentives to encourage private developers with complying which are of little cost to the County, including a County-run educational program, and two awards for the greenest structures in the County.

As for private projects, the code heavily encourages participation through several subproject categories: new residential, remodeling of existing homes, new commercial or institutional buildings, existing commercial and institutional buildings, existing commercial and institutional buildings. Under these programs, projects need only meet one of several green building ratings including Leadership in Energy and Environmental Design (LEED) or Florida Green Building Coalition (FGBC) standards. For example a project that falls under "New Residential Permitted Projects" need only meet one of the following requirements to receive incentives: the current Green Home Designation Standard of the FGBC; the current USGBC LEED for Homes program; the current National Association of Home Builders National Green Home program; or the GBI new home designation. Such attractive incentives offered to private projects, such as a new residential project seeking one of Lake County's acceptable green designations is that green projects are fast tracked; permits for certain green projects can be issued as soon as three business days.

The most important and impressive aspect of the County's green building code is that constant assessments and data monitoring is required. Each year the index report and goals will be evaluated to see if any additional changes or improvements can be made to the code and green building requirements.

Resource

CODE OF ORDINANCES – LAKE COUNTY, FLORIDA Chapter 6: Buildings and Construction ARTICLE VIII. GREEN BUILDING STANDARDS § 6-106 to § 6-117

§ 6-106. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

ASHRAE: Acronym for the American Society of Heating, Refrigeration and Air Conditioning Engineers. ASHRAE 90.1 Appendix G: Standard developed by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) to provide specific guidance on the rules and procedures used to simulate building energy use when the objective is to substantially exceed the requirements of ASHRAE Standard 90.1-2004, "Energy Standard for Buildings Except Low-Rise Residential Structures."

Commission: The Board of County Commissioners of Lake County, Florida.

Conserve Florida: Name of a statewide water conservation effort by water management districts and Florida Department of Environmental Protection to develop and implement an accountable and measurable program to allow public water supply utilities to tailor cost-effective conservation programs to reflect their individual circumstances to achieve greater water-use efficiency.

Construction: Any project associated with the creation, development or erection of any building eligible for the program.

Current: The standard in place at the time a program participant submits a project application form with the jurisdiction.

FBC: Acronym for the Florida Building Commission.

FGBC: Acronym for the Florida Green Building Coalition, Inc., a Florida 501(c)3. not-for-profit corporation whose mission is to establish and maintain a Florida system of statewide green building standards and third-party certification programs with environmental and economic benefits.

FGBC Local Government designation: A designation given by FGBC to a city or county that achieves the requirement of their local government rating system that examines environmental best practices for all local government functions. Levels of platinum, gold, silver and certified can be achieved.

Federal tax credit for energy efficient homes: Refers to the tax credit recognized by the U.S. Internal Revenue Service for the construction of a home.

Federal tax credit for solar energy systems: Refers to the tax credit recognized by the U.S. Internal Revenue Service for the installation of qualified residential solar water heating or photovoltaic systems.

Florida Green Lodging: A program by the Florida Department of Environmental Protection to designate lodging establishments as "green" for following environmentally sensitive operating procedures.

FSEC: Acronym for Florida Solar Energy Center. As the State of Florida's energy research institute, FSEC conducts research in building science, photovoltaics, solar thermal, hydrogen and alternative fuels, fuel cells and other advanced energy technologies.

Florida Solar Energy System Incentives Program: A program of state law providing for rebates for the installation of qualified solar energy systems, codified at section F.S. § 377.806.

Florida Water Star Program: A third-party certification program offered by water management districts to encourage water efficiency in household appliances, plumbing fixtures, irrigation systems and landscapes.

Florida Yard and Neighborhoods: A University of Florida Extension Service program that encourages homeowners and professionals to create and maintain Florida-friendly landscapes that protect the natural environment for future generations. The program consists of nine principles indicating how to locate the right plant in the right place, water efficiently, fertilize appropriately, mulch, attract wildlife, manage pests responsibly, recycle, reduce stormwater runoff and protect the waterfront.

GBI: Acronym for the Green Building Initiative, a not-for-profit organization whose mission is to accelerate the adoption of building practices that result in energy-efficient, healthier and environmentally sustainable buildings by promoting credible and practical green building approaches for residential and commercial construction.

GHDS: Acronym for the Green Home Designation Standard of the Florida Green Building Coalition, Inc.

GHG: Acronym for greenhouse gases.

Green building: A designation given to buildings that meet and are maintained to the requirements of the green building rating system defined in this green building program.

Green building program: The program outlined in this ordinance for obtaining incentives for green buildings and developments.

Green development: A land use planning concept that includes consideration of community-wide or regional environmental implications of development, as well as site-specific green building concepts. This includes city planning, environmental planning, architecture and community building. Green development is about constructing buildings and landscapes in a more environmentally friendly manner. It is development that helps to improve air and water quality, reduce greenhouse gas emissions and enhance the neutral environment.

Green Globes: The U.S. commercial/institutional building rating system of the Green Building Initiative.

HERS Index: The Home Energy Rating System Index used as part of Florida's Home Energy Rating system in which a home with a HERS Index of 100 represents the energy use of the "American Standard Home" and an Index of zero (0) indicates that the rated home uses no net purchased energy.

Independent or Independent of Lake County: Not employed by, or acting as agents of, Lake County.

IBHS: Acronym for the Institute for Business and Home Safety. An insurance and reinsurance organization whose mission is to reduce the social and economic affects of natural disasters and other property losses by conducting research and advocating improved construction, maintenance and preparation practices.

LEED: The Leadership in Energy and Environmental Design Rating System of the U.S. Green Building Council.

NAHB: Acronym for the National Association of Home Builders, a Washington-based trade association whose mission is to enhance the climate for housing and the building industry.

Positively Green Project: A building project that generates more energy on-site through renewable sources than it uses on an annual basis while providing for its water needs through typical annual rainfall, and meets all of the requirements of this jurisdiction's green building program. To meet energy qualifications, residential applicants shall achieve a HERS index of zero (0) or less, and non-residential shall achieve one hundred (100) percent energy reduction from non-renewables using procedures in ASHRAE 90.1 Appendix G. rating procedure.

Program: Lake County's Green Building and Development Program.

Program certification: The final designation awarded to a program participant for satisfying all requirements associated with the program for a particular project.

Program participant: Any person or entity seeking program certification for a particular project.

Project: Any construction associated with the creation, development or erection of any building or development eligible for the program.

Project application form: The form submitted to Lake County indicating that a program participant is interested in participating in the program for a particular project.

Sub-program: Means any area of construction covered by the program.

Sustainable construction: The process of environmentally sensitive, resource efficient site selection, preparation, design, construction and operation of buildings.

Unit: A residence permitted according to the Florida Building Code (FBC).

USGBC: Acronym for the United States Green Building Council, a non-profit organization whose mission is to transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy and prosperous environment that improves the quality of life.

§ 6-107. Title.

The provisions of this article shall be known as the "Lake County Green Building and Development" Code.

§ 6-108. Purpose and intent.

The purpose is to establish goals, programs and procedures that will help Lake County become a more sustainable community. This program shall establish new environmental goals for Lake County, define a certification-based green-building and development program with incentives, and define new measurement parameters and reporting criteria to track Lake County's performance toward its environmental goals. This program will promote economic and environmental health in Lake County, through the design, construction, operations and deconstruction of its own facilities and provide leadership to both the private and public sectors in the arena of green building and development practices including resource efficiency and disaster mitigation. Specific practices are outlined below.

- (1) Promote a sustainable future that meets today's needs of a stable, diverse and equitable economy without compromising the ability of future generations to meet their needs by:
- a. Protecting the quality of the air, water, land and other natural resources;
- b. Conserving native vegetation, wildlife and habitat;
- c. Minimizing human impacts on local ecosystems and ecosystems worldwide; and
- d. Reducing greenhouse gas emissions.
- (2) Become a leader in setting policies and practicing service delivery innovations that promote environmental sustainability.
- (3) Create a sustainable jurisdiction by delivering renewable energy and energy-efficient projects, developing green buildings and water-thrifty landscapes, resource education, and utilizing recycling and environmentally sound solid-waste services.
- (4) Establish a green building program to:
- a. Improve the economic and environmental health of Lake County through measurable objectives;

- b. Track and analyze key indices to measure performance;
- c. Commit Lake County to achieve green designations;
- d. Provide incentives for voluntary compliance;
- e. Provide green building educational opportunities for the community; and
- f. Execute a green building and development program to help local government. meet its overall goals of reducing emissions, reducing energy needs, and water consumption consistent with the states' initiative.
- § 6-109. Government leadership.

To demonstrate Lake County's commitment to a green-building program, Lake County shall comply with the green building programs established herein for all government buildings, and shall:

- (1) Become and maintain an FGBC Local Government designation;
- (2) Track the government's monthly water and energy use; and
- (3) Produce an annual report that outlines Lake County's energy and water use and greenhouse gas emission performance for the prior year and outlines a plan to reduce it for the coming year.
- § 6-110. Designation of responsibility for administration and implementation.

The program shall be administered by the department of conservation and compliance, which shall be responsible for, but not be limited to, the following:

- (1) Marketing the program to the community by any reasonably effective means;
- (2) Developing any appropriate or necessary application procedures, including but not limited to, the program application form;
- (3) Writing policies and procedures for staff implementation of the green building and development program;
- (4) Providing the certifications for use in the program;
- (5) Providing an incentive award to any program participant who has successfully satisfied the requirements associated with that incentive; and
- (6) Resolving disputes that may arise from implementing the program.

- § 6-111. Green building and development program applicability.
- (a) For all private projects, the program shall be voluntary.
- (b) For any new building owned and constructed by or on behalf of the Lake County Board of County Commissioners (BCC), the program shall be mandatory.
- (c) For any alteration of a government building owned by the Lake County BCC undergoing a level III or greater alteration, per FBC, shall comply with this program providing a positive cost analysis can demonstrate one hundred (100) percent pay back within ten (10) years.
- § 6-112. Green building and development coverage.

The program shall be comprised of the following sub-programs:

- (1) New residential construction;
- (2) Residential retrofitting/remodeling;
- (3) New commercial/non-residential construction;
- (4) Existing commercial/non-residential construction; and
- (5) Land developments
- § 6-113. Green building and development standards.

In addition to the Florida Building Code's minimum standards, the program shall be administered using standards developed by the Florida Green Building Coalition, the U.S. Green Building Council, the Green Building Initiative, or the National Association of Home Builders. Programs shall stand alone and shall not be mixed. In order to qualify for incentives set forth in section 6-114, these standards shall apply to each sub-program as follows:

- (1) New residential permitted projects: New residential projects shall satisfy all of the requirements associated with one (1) of the following:
- a. The current Green Home Designation Standard of the FGBC;
- b. The current USGBC LEED for Homes program;
- c. The current National Association of Home Builders National Green Home program; or

- d. The GBI new home designation including but not limited to, any monetary or certification requirements.
- (2) Remodeling of existing homes: The participant shall meet requirements of remodeling certification for one (1) of the following:
- a. The current Green Home Designation Standard of the FGBC;
- b. The current LEED for Homes® program;
- c. The current NAHB National Green Home program; or
- d. The GBI including but not limited to, any monetary or certification requirements. The home shall meet the requirements for "remodeling" or "existing home" of the designation.
- (3) New commercial or institutional buildings: The program participant shall satisfy all of the requirements associated with one (1) of the following:
- a. The current Green Commercial Designation Standard of the FGBC;
- b. The current LEED for New Construction or derived USGBC LEED rating system (e.g., LEED for Schools, LEED for Health Care); or
- c. The Green Globes environmental assessment system for new designs including but not limited to any monetary or certification requirements.
- (4) Existing commercial and institutional buildings: The program participant shall satisfy all of the requirements associated with one (1) of the following:
- a. The current Green Commercial Designation Standard of the FGBC;
- b. The current LEED for existing buildings or derived USGBC LEED rating system (e.g., LEED for Schools, LEED for Health Care) program; or
- c. The Green Globes environmental assessment system for existing designs, including but not limited to any monetary or certification requirements.
- (5) Land Developments (Green Development): The participant shall satisfy all of the requirements associated with one (1) of the following:
- a. The current Green Development Designation Standard of the FGBC;
- b. The current LEED for Neighborhoods and Developments rating system program; or

- c. The NAHB development designation, including but not limited to any monetary or certification requirements.
- (6) Review: For the purpose of this section of the program, a program participant shall be bound by the standard designated for a particular sub-program unless the program participant requests to be certified under a more current version of a designated standard and the request is approved by the department administering the particular program.

§ 6-114. Incentives.

The program shall include incentives designed to encourage the use of the program.

- (1) All sub-programs: For any voluntary program participant seeking a program certification, Lake County shall provide the following fast track permitting incentives:
- a. Site and development plans for a proposed green development shall be processed in twenty (20) business days. All such applications shall be accompanied by the appropriate green building and development program application form.
- b. Building permit applications for residential green buildings shall be processed within three (3) business days. All such applications shall be accompanied by the appropriate green building and development program application form.
- c. Building permit applications for commercial green buildings shall be processed in ten (10) business days. All such applications shall be accompanied by the appropriate green building and development program application form.
- (2) Green building award: For the purpose of publicly recognizing outstanding commitment to "green building and development," the program shall provide for an award called the "Green Building and Development Award" to be awarded annually by Lake County to one program participant in each sub-program.
- (3) Special green contribution award: Lake County shall annually provide a special recognition award to those contractors that donate significant reusable building materials to non-profit local building organizations.

§ 6-115. Education and training.

- (a) Lake County, in conjunction with FSEC, FGBC, Green Globes, NAHB or USGBC shall conduct at least one (1) training workshop per year for the purpose of educating potential or current program participants about the program.
- (b) Lake County shall attempt to make available a meeting space at a government facility when available for green building and development programs offered by

organizations that are of a general nature (not product specific). Organizations shall contact the facilities staff to make arrangements.

§ 6-116. Index and report.

The goals and objectives of the program and their status as outlined in section 6-108 shall be recorded, analyzed and reported to the commission (BCC). The administrator/manager shall be responsible for this indexing and reporting.

§ 6-117. Program review.

- (a) Staff review: Lake County shall provide for a review of the program to determine the need for changes in the program to increase it effectiveness.
- (b) Frequency: The program shall be subject to review one (1) year after the effective date of this ordinance and thereafter at a frequency of not more than once per year.
- (c) Purpose: The purpose of reviewing the program includes, but is not limited to, updating program incentives, recommending program or marketing changes to Lake County, reviewing suggestions made by program participants, and annually awarding the green building and development awards of the program.