



Meeting Name: Planning and Zoning Board
Meeting Date: March 4, 2024
Prepared By: Davila, CFM.
Item Title: Discussion on LEED/Green Building

DISCUSSION:

As part of the Board's prioritized agenda item list, item F, discussion on LEED/Green Building Designs, Town staff is bringing this item for board discussion.

For the Board's review and discussion, staff is providing the following information:

- **What is LEED?**
LEED (Leadership in Energy and Environmental Design) is the world's most widely used green building rating system. LEED certification provides a framework for healthy, highly efficient, and cost-saving green buildings, which offer environmental, social and governance benefits.
- **What is a Green Building?**
"Green building" fits within the concept of sustainable development, as it supports sustainability through construction practices that conserve energy and water resources, preserve open spaces, and reduce waste produced by the structure at any point in its life cycle. A building's life cycle includes the siting, design, construction, operation or use, maintenance, renovation and ultimately deconstruction.

"Green buildings" are designed to reduce the overall impact of the built environment by:
 - Efficiently using energy, water, and other resources
 - Reducing waste, pollution, emissions and environmental degradation
 - Protecting occupant health and increasing productivity by improving indoor air quality, connecting the occupant with daylight, and providing natural spaces to enjoy
 - Integrating well within the community by increasing density, connecting to other places, inviting pedestrians and cyclists, and following sustainable design guidelines

- Which communities have this as part of their code?

Town of Jupiter

Sec. 27-2405. - Green building program Purpose and intent.

- (a) The purpose of this program is to provide green building standards which promote sustainable construction, water efficiency, energy efficiency, sustainable material selections and improved indoor environmental quality for new development and redevelopment projects.
- (b) It is the intent of this program to provide incentives by providing for waivers from the town's land development regulations provided new development or redevelopment projects achieve green building certification based upon the standards for green developments in either the Florida Green Building Coalition, Inc. (FGBC) or the United States Green Building Council (USGBC).

(Code 1992, § 27-1675.27; Ord. No. [5-16](#), § 2, 1-17-2017)

Sec. 27-2406. - Applicability, incentives, and public benefits.

The green building program, and the incentives herein, may be applied to Large-Scale Planned Unit Development Districts (PUD) or Small-Scale Planned Unit Developments (SSPUD) which are certified by the Florida Green Building Coalition (FGBC) or the United States Green Building Council (USGBC). As an incentive to incorporating green building standards into an applicant's project, the town may grant waivers to the building standards and land development regulations of the town Code. The number of the waivers to be approved for projects certified by either the FGBC or USGBC shall be commensurate with the number of green building standards incorporated into the buildings and the certification level achieved. Projects which are certified by the FGBC or USGBC shall be entitled to use the green building certification as a public benefit.

City of Palm Beach Gardens

Sec. 78-222. - Transit oriented development (TOD) overlay district.

Environmentally friendly design. Projects that qualify for LEED certification from the U.S. Green Building Council, or equivalent certification, or provide environmentally-friendly design elements are eligible for a density bonus of up to two units per acre upon demonstration of the following:

- i. An affidavit from the applicant detailing the proposed environmentally friendly components to be provided with the project shall be submitted with the development application for review.
- ii. LEED certification level of silver or better, or equivalent green building rating system shall be utilized. A checklist of the items to be provided to qualify for the certification shall be provided for staff review.
- iii. Elements provided to meet Code requirements, such as mobility QOS standards, may not be counted towards density bonuses unless specifically listed in this section.

Village of Tequesta

Comprehensive Plan

Objective: 2.14.0 The Village shall seek to reduce greenhouse gas emissions and conserve energy resources.

Policy: 2.14.2 The Village shall encourage the implementation of low impact development techniques and green building standards that reduce the negative environmental impacts of development and redevelopment by: locating building sites away from environmentally sensitive areas; promoting the preservation of natural resources; providing for on-site mitigation of impacts (i.e. retention and treatment of stormwater runoff, water reuse, Master Stormwater Management Systems); promoting energy conservation through design, landscaping and building techniques (i.e. solar power, increased tree canopies); promoting water conservation through landscaping and building design; ensuring environmentally friendly building practices (i.e. use of environmentally friendly building materials, recycled materials), and; considering the development of a Green Building Ordinance and a related LEED Certification Program for development and redevelopment, including the development of a Neighborhood Development Rating System that integrates the principles of smart growth, urbanism and green building into a national system for neighborhood design.

Policy: 2.14.3 The Village shall seek to limit greenhouse gas emissions through the implementation of strategies to reduce the number of vehicle miles travelled. These strategies may include but not be the promotion of mixed use development that provides for a mixture of residential and non-residential land uses in a pedestrian friendly environment with multi-modal transportation connectivity to other areas; promoting the use of alternate transportation modes as specified herein, including mass transit, bicycles, and pedestrianism, and; requiring Transportation Demand Management Programs as a condition for development approvals.

Palm Bay

§ 170.153 INCENTIVES.

The program shall provide the following incentives for participants:

(A) Submittal, Review, and Construction Phase.

(1) *Expedited Permitting.* Applications for building permits and site plan reviews shall be reviewed on an expedited basis by city staff. Expedited shall be prioritizing such permitting and review ahead of non-participant projects.

(2) *Signage.* Participants shall be permitted to erect signage promoting their participation in the program as well as the certifying agency promotional materials on the site. Said signage shall not count toward the number of construction or future improvement signage normally permitted by the Sign Code.

(3) *Web Page Promotion.* The participant's project shall be listed on the city's website under the program's heading for a minimum of one year. City staff will develop the promotion with input from the participant.

(4) *Reduction in Building Permit Fees.* The calculation of building fees due shall exclude the marginal cost for compliance with the program standards. Therefore, only standard valuations as are typically utilized to calculate value shall be employed. Alternatively, the contractor may provide specific cost differential calculations for use by the Building Division when calculating fees.

(B) Upon Completion.

(1) *Fee Refunds*. The participant shall be entitled to a refund of 50% of the administrative site plan fee upon provision of the final certification from the appropriate rating agency.

(2) *Green Building Program Proclamation*. The participant shall receive a proclamation from the city at a City Council meeting recognizing the achievement under the City of Palm Bay Green Building Incentive Program.

(Ord. 2010-54, passed 10-21-10)

Fort Lauderdale

The City supports sustainable building primarily through the implementation of the South Florida Building Code which was recently updated to strengthen efficiency requirements. We also encourage the use of LEED and other green building standards and certification programs, whether to apply for recognition or simply to follow the guidelines. Finally, we offer a variety of Green Building Tips to help you make decisions about new construction, renovation, home repairs and maintenance.

- Example of LEED/Green Buildings cities and projects

FPL NextEra Energy Inc. Building GOLD Juno Beach

Resilience initiatives undertaken by the West Palm Beach (GOLD):

- Ongoing efforts to decrease greenhouse gas emissions through electrification of 18 city fleet vehicles, with a goal to transition all available fleet vehicles away from petroleum.
- Monitoring, maintenance and protection of Grassy Waters Preserve, the city's primary drinking water supply source, and
- Distribution of 6,000+ free, native trees to residents to increase the city's tree canopy and reduce heat impacts.

Palm Beach County (Gold)

Palm Beach County achieved LEED certification by implementing practical strategies and solutions with measurable outcomes aimed at improving sustainability and the standard of living for residents including:

- Maintaining over 30,000 acres of natural areas in the county. Along with natural areas maintained by federal, state, and other local governments, almost 400,000 acres of South Florida's unique ecosystem are preserved in Palm Beach County
- Founding membership in the Southeast Florida Regional Climate Change Compact, a four-county collaboration to cooperate on climate change adaptation and mitigation across the region
- Working on reducing the county's per-person greenhouse gas emissions, which are already roughly half the national average

Solid Waste Authority (SWA) in Palm Beach County (Platinum)

The Authority's Education Center is LEED Platinum Certified. LEED stands for Leadership in Energy and Environmental Design. This building was built to be energy efficient and relies on renewable energy. Some items that make this building LEED Platinum Certified are outlined in the next few sections:

- The tile floors in the building are made from recycled tires.
- There are many windows, so we don't need to use a lot of artificial light. This is called day lighting. Also, the metal shades on the windows redirect the sunlight away from the building, which helps to keep the building cooler.
- The light bulbs are energy efficient and motion activated. They also change their intensity depending on the amount of light coming in through the windows.
- The building's green roof is another aspect that makes it LEED Platinum Certified.
- Just outside the doors on the third level, is the green roof. It houses multiple species of plants, all of which are Florida natives and adapted to the weather here. These plants are used to living in the hot, wet summers and dry winters, which means we don't have to add a lot of extra fertilizer and water for them to survive. The plants are great alternatives for a South Florida yard, and provide food for bees and butterflies. This rooftop garden helps to absorb heat, carbon dioxide and storm water. This keeps the building cooler and allows us to use the captured water for our restrooms, sinks and landscaping. The cistern next to the Education Center can hold 12,000 gallons of rainwater.

RECOMMENDATION:

Staff is ready to answer any questions the Board may have on this item.

Reference(s):

US Green Building Council

<https://www.usgbc.org/leed>

Town of Jupiter

https://library.municode.com/fl/jupiter/codes/code_of_ordinances?nodeId=SPBLADERE_CH27ZO_ARTXISUDIRE_DIV18GRBUPR

City of Palm Beach Gardens

https://library.municode.com/fl/palm_beach_gardens/codes/code_of_ordinances?nodeId=SPBLADERE_CH78LADE_ARTVSUDIRE_DIV2PGBOCOVS78-222TRORDETOOVDI

Village of Tequesta

<https://www.tequesta.org/DocumentCenter/View/9973/CLEAN-GOPS-COMPLETE-COMP-PLAN>

Palm Bay

https://codelibrary.amlegal.com/codes/palmbay/latest/palmbay_fl/0-0-0-47217

Fort Lauderdale

<https://gyr.fortlauderdale.gov/greener-government/responsible-development-land-use/sustainable-building>