

RESOLUTION NO. 2024-398

A RESOLUTION BY THE BOARD OF COUNTY COMMISSIONERS OF ST. JOHNS COUNTY, FLORIDA, ESTABLISHING AN ST JOHNS COUNTY ENERGY MANAGEMENT PROGRAM AND POLICY; AND PROVIDING FOR AN EFFECTIVE DATE.

RECITALS

WHEREAS, the Board of County Commissioners of St. Johns County, Florida (“Board”) seeks to establish a St. Johns County Energy Management Program and Policy as shown in *Attachment “A”*; and

WHEREAS, the Board recognizes the proper Energy Management is a necessary and desirable goal.

NOW THEREFORE BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF ST. JOHNS COUNTY, FLORIDA, AS FOLLOWS:

Section 1. The above Recitals are hereby incorporated into the body of this Resolution, and are adopted as Findings of Fact.

Section 2. The Board of County Commissioners hereby approves the St. Johns County Energy Management Program, and it shall be adopted as stated in *Attachment “A”*, and made part of this resolution.

Section 3. To the extent that there are typographical or administrative errors that do not change the tone, tenor, or concept of this Resolution, then this Resolution may be revised without subsequent approval of the board of County Commissioners.

Section 4. This Resolution shall be effective upon its execution.

PASSED AND ADOPTED by the Board of County Commissioners of St. Johns County, Florida, this 17th day of September, 2024.

**BOARD OF COUNTY COMMISSIONERS
OF ST. JOHNS COUNTY, FLORIDA**

Rendition Date SEP 17 2024

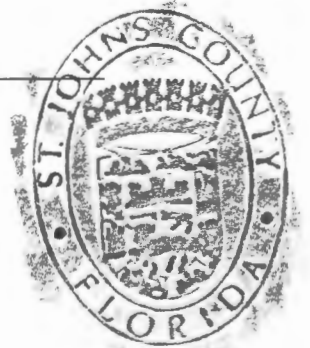
By:



Sarah Arnold, Chair

ATTEST: Brandon J. Patty
Clerk of the Circuit Court & Comptroller

By: Crystal Smith
Deputy Clerk





SJC Energy Management Program

August 27, 2024



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Definitions and Acronyms

EUI	Energy Usage per Square Foot (kBtu/sqft)
ASHRAE	American Society for Heating, Refrigeration, and Air-Conditioning
ITS	Engineers Information Technology Systems
ROI	Straight Line Return on Investment
SME	Subject Matter Expert
BAS	Building Automation System
FLS	Facilities Liaison Staff
FMT	Facilities Management Team
IAQ	Indoor Air Quality

Purpose

The primary focus of the County Energy Management Program is as follows:

- Building Schedules matched to occupancy (work schedules/unoccupied hours).
- Implementation of energy projects to further decrease consumption.
- Encourage county staff to be responsible to minimize their personal impact on energy consumption.

The Facilities Management team will utilize various techniques to measure building performance, investigate anomalies, and develop energy priorities, suggestions, and management techniques.

The Facilities Management team will deploy Data-Loggers and/or utilize BAS Data-Loggers to verify building conditions. In addition, the FMT will work with FLS and other Building leaders to optimize building schedules.



Scope

The program covers all County-Owned properties.

Program Management

The program is managed by the Facilities Management Department.

Key Personnel and Responsibilities

A. Facilities Management Team

1. **BAS Team Leader:** The Team Leader will develop, refine, manage, and track the County Energy Management Program. This will include oversight of External Resources and Operational Resources.
2. **FMT Division Superintendents:** The Superintendents will work with customers to refine building schedules. Work with BAS Team Leader to develop and implement energy management projects to reduce consumption.
3. **FMT Director:** Provide ROI review of proposed energy programs/projects. Function as SME for projects targeted towards most energy intensive spaces. Work with BAS Team Leaders to explore potential grant/rebate/funding opportunities.

B. Engineering Services

1. **External Resources:** When a project is too large to complete with internal resources, an external engineering firm may be selected using the County's Continuing Contracts Program.

C. ITS

1. **Data Visualization:** Provide visualization of Building Energy Usage via County BAS and associated Analytic Software (i.e. SkySpark).



Energy Reduction Principles

A. HVAC

1. **Scheduling:** Systems will be scheduled to maintain County Setpoints during occupied hours. Systems will “Set-Back” during non-occupied hours but will maintain humidity control in the subject space. For low occupancy during occupied hours, the BAS will adjust based on the amount of people in space. For after-hours HVAC requests, staff will use the County Work-Order System to submit requests.
2. **Setpoints:** Each building has its own personality, but in general, County buildings will be maintained in a range of 72-78 degrees F during the cooling season and 68-72 degrees F during the heating season. Each building will operate during occupied hours in this range, but the exact setting for the building will be set per the Original Basis of Design (BOD). During unoccupied hours, the setpoints will be adjusted to protect the building, not comfort.
3. **Special Spaces:** The settings in “Special Spaces” are individually determined based on need.
4. **Doors:** All exterior doors are to remain closed to ensure the system can perform according to original design.
5. **Space Heaters:** Space Heaters or additional cooling equipment are not permitted unless approved by FMT to compensate for building systems that cannot maintain setpoint and/or other issues identified by FMT.
6. **Reporting:** Each person has the responsibility to report HVAC systems that are not operating within the setpoints during occupied hours or are running during unoccupied periods to Facilities Management. A Facilities work-order will be generated to investigate.

B. Lighting

1. **Scheduling:** Lighting systems will be scheduled or manually turned off when the area is not in use (apart from emergency/pathway lighting). The principle applies to both indoor and outdoor lighting. Occupants are encouraged to turn lights off in their area during normal occupied hours when not in use.
2. **Reporting:** Each person has the responsibility to report lighting that is operating when unneeded (i.e., exterior lighting on during daylight hours). A Facilities work-order will be generated to investigate.



C. Irrigation Water

1. **Scheduling:** Sprinkler Systems should be operating during the day. Systems should be programmed to minimize the use of irrigation when raining. In addition, systems must be installed to irrigate only the vegetation and not impervious structures or buildings. All irrigation systems should minimize water runoff.
2. **New Irrigation Systems:** Each new system shall be reviewed by the FMT prior to installation to ensure that systems are connected to irrigation meters to avoid sewer charges.
3. **Reporting:** Each person has the responsibility to report malfunctioning irrigation systems (i.e., broken irrigation heads). A Facilities work-order will be generated to investigate.

D. Water

1. **Reporting:** Each person has the responsibility to report leaking pipes or fixtures to the FMT. A Facilities work-order will be generated to investigate.

E. Roof, Building Envelop Leaks

1. **Reporting:** Each person has the responsibility to report a roof, window, or wall leak to the FMT. A Facilities work-order will be generated to investigate.

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Variance Request Process

The Variance Request process allows departments to request a deviation from the standard settings, schedule changes not permitted by the current energy program, or to seek approval for reclassification of a general space into a “special space”.

Once the request is completed, it will be reviewed by the FMT to clarify the request and then submitted to County Administration for review/approval/denial.

Humidity & IAQ Control Program

A. Humidity

1. Building humidity should remain below 70% in all County buildings regardless of whether building is occupied or unoccupied. Dehumidification equipment may be provided in cases where the building HVAC system is unable to maintain conditions.
2. Extended data-logging when system performance is in question.

B. Indoor Air Quality (IAQ)

1. **Exterior Windows:** One of the main contributors to high humidity and potential mold/mildew is related to unauthorized opening of windows. All County buildings are designed with the intention that windows should remain closed. When a window is not considered a safety exit by the Authority having Jurisdiction (AHJ), it shall be secured shut with no means of opening.
2. **Doors:** All exterior doors should remain closed with no use of door props, stops, or other means of preventing a complete closure.

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Appendixes

A. ASHRAE: <http://ashrae.org>

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