

Escambia County Energy Efficiency and Conservation Strategy

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Introduction

The following document contains Escambia County's Energy Efficiency and Conservation Strategy (EECS) to introduce current efficiency and conservation initiatives and define the county's sustainability goals. The Escambia County EECS was developed using the Department of Energy's (DOE) Blueprint 1: Energy Planning. This plan will assist local officials in making strides toward reduced energy consumption, cleaner air, reduced utility costs, and greater resilience and sustainability for Escambia County.

The strategy highlights sustainability efforts preceding this document and introduces short term and four long term goals. The four long term goals are to reduce energy consumption, reduce greenhouse gas emissions, develop Electric Vehicle charging infrastructure, and enhance recycling efforts in Escambia County.

The EECS is the next step to streamline and centralize ongoing efficiency and conservation efforts in Escambia County following the initiation of the ongoing greenhouse gas emissions inventory (GHGI) of government operations.

Benefits of Energy Efficiency and Conservation

The Department of Energy suggests that in many buildings, energy costs can be reduced by 20% or more through energy efficiency measures. The Median year of construction of Escambia County facilities is 1992, indicating over half of the facilities operated by the County are greater than 32 years old. Facilities built prior to 1992 were constructed prior to the conception of now common cost saving initiatives including ENERGY STAR, LEED, and incentives for energy efficient construction methods.

Simply put, improving energy efficiency benefits everyone. Reducing power consumption reduces the burden on the County's operating budget and allows the County to invest in other important initiatives. Developing infrastructure to allow Electrifying the County fleet may lead to a reduction in harmful tailpipe emissions generated through the execution of government services. Enhancing the County's recycling program will help to extend the life of the Perdido

Landfill. Each of these benefits represent a cost savings or a reduction in emissions generated by government operations.

Energy efficiency and conservation leads to economic, environmental, and social benefits for the citizens of Escambia County. Economic benefits are gained when efficiency and conservation upgrades and actions lead to a reduction in spending long term. Efficiency and Conservation actions may range from tuning HVAC systems, to building envelope improvements, and updating failing or inefficient lighting and assets with energy efficient replacements. These improvements can translate into thousands of dollars in energy savings over the lifetime of the device(s).

Environmental benefits from activities such as installing electric vehicle (EV) charging stations will create opportunity for the electrification of fleet vehicles and reduction of tailpipe emissions produced through the delivery of government operations. Reducing emissions produced in Escambia County may lead to environmental benefits such as cleaner air and water.

Escambia County may gain social benefits from investments in efficiency and conservation through tourism revenue for years to come. Maintaining a high level of environmental stewardship is reflected by Escambia County's stunning natural resources. The natural beauty of our resources and the ecosystem services they provide continue to support vibrant fisheries and enable Escambia County to gain recognition as a world-class destination. Protecting the health of our natural resources helps to ensure a bright future for Escambia County.

Existing Initiatives Supporting Efficiency, Conservation, and Sustainability

Escambia County made sustainability and conservation a priority in 2023. With the adoption of SustainaBase software, Escambia County has initiated a greenhouse gas emissions inventory (GHGI) of government operations to track electricity, natural gas, and water consumption of facilities operated by Escambia County, and fleet fuel consumption. The GHGI will analyze utility bills from 2023 to develop a baseline measurement of consumption. The baseline year will also allow county staff to begin an audit of facilities that will lead to a prioritized list of where energy efficiency investments may be most effective beginning in 2025.

Escambia County will make informed immediate, short term, and long-term plans to invest in a reduction in greenhouse gas emissions. As identified in the Escambia County Energy Conservation Plan, immediate actions may include facilities walk-throughs to identify immediate measures such as elimination of unneeded appliances and identification of water or energy leaks. Short term measures that may be implemented in the present fiscal year may include activities such as installing timers on water heaters and improving the facility envelope with weather stripping where drafts have been identified. Long term measures are those that require greater planning and investment and cannot be accomplished in the present fiscal year. These include replacement of older or deficient equipment such as high flow toilets and inefficient HVAC equipment. Refer to the Escambia County Energy Conservation Plan for a more comprehensive discussion of immediate, short term, and long-term measures to improving energy efficiency.

EECS Development

Escambia County utilized the Department of Energy's Blueprint #1-Energy Planning Tool to develop an EECS that:

1. Provides measurable goals and objectives
2. Describes how funds will be utilized to achieve goals and objectives
3. Identifies adjacent units of local governments receiving funds
4. States how Escambia County will share information and coordinate with the State
5. Discusses how to achieve sustained benefits beyond funding period
6. Identifies a strategy for fraud, waste, and abuse

Vision

The vision of the EECS is to reduce energy costs by decreasing energy usage among County facilities, assets, and fleet. Improving energy efficiency and fleet electrification can contribute to improved air quality for Escambia County's citizens. An ongoing audit of facilities and fleet vehicles through the GHGI will allow the County to evaluate where efficiency investments may have the greatest potential for long-term savings.

Goals for Energy Efficiency and Conservation

Near term goals and outcomes:

Escambia County will promote immediate measures that can be performed at the present time requiring no additional funding as outlined in the Escambia County Energy Conservation Plan. The county will utilize the DOE's Blueprint 2A to complete energy audits on facilities identified for consuming a disproportionate amount of resources in the GHGI. Natural Resources Management Department staff will share findings with Facilities Management Department staff to identify potential opportunities for Energy Savings Performance Contracting as outlined in DOE's Blueprint 2B. Potential efficiency upgrades will be guided by the DOE's Blueprint 2C.

The outcome of near-term goals will be the development of a prioritized record of recommended efficiency enhancing projects allowing Escambia County to seek funding from state and federal funding agencies. Potential funding programs may include the US DOE Energy Efficiency Block Grant, Florida Clean Energy Grants, and Clean Energy Florida Renewable Energy, Efficiency and Conservation Grants (CE-FREEC), among other opportunities.

Long term goals:

Reduce Energy Consumption: Reduce energy use through improvements to building envelopes where energy leaks are identified, conducting maintenance on leaking or faulty equipment or assets aimed to increase efficiency, and investing long term efficiency upgrades such as increasing the SEER rating of new HVAC systems over previous levels of efficiency. The objective of this goal is to complete cost-effective facilities improvements aimed at reducing energy consumption and energy costs. Improvements will be implemented as funds for efficiency and conservation efforts become available through federal, state, and budgeted local funds.

Reduce Greenhouse Gas Emissions: Escambia County will reduce greenhouse gas emissions per square foot of construction by promoting energy efficient construction practices where feasible. Escambia County will seek funds to develop EV Charging infrastructure at facilities where the greatest benefit of fleet electrification is determined through the GHGI.

Develop Electric Vehicle Charging Infrastructure: The GHGI includes an assessment of the County's fleet vehicles in order to identify which vehicles may be suitable for converting to EV as departments purchase new vehicles. Escambia County will seek funding through federal, state, and local budgeting to develop EV Charging infrastructure at facilities determined most likely to house EVs based on the outcomes of the GHGI.

Enhance Recycling Efforts in Escambia County: Escambia County will provide collection and disposal of recyclable goods at government complex buildings. The objective of this goal is to extend the lifespan of the Perdido Landfill by encouraging the diversion of refuse through the Escambia County recycling facility. This goal will be achieved through placement of recycling bins and coordinating with facilities staff to dispose of recycling in recycling containers.

Implementation Strategy

Escambia County is developing GHGI in 2024 and will utilize the Energy Efficiency Conservation Block Grant funding to install Electric Vehicle Supply Equipment for fleet vehicles, conduct building energy audits, and to contract temporary staff to coordinate sustainability and conservation initiatives in Escambia County.

Escambia County will maintain a Fraud, Waste, and Abuse Hotline to gather information on potential waste. Further, Natural Resources Management Department staff will supplement this effort with a focus on gathering staff input on energy efficiency and conservation as an auxiliary task to the GHGI.

Collaboration

Escambia County will continue to coordinate and share information with the State Energy Office to communicate energy efficiency and conservation initiatives and milestones, including EECBG program updates. Escambia County will coordinate and share information with the City of Pensacola and Neighboring Santa Rosa County.

Conclusion

Escambia County's four long term energy conservation goals are to Reduce Energy Consumption, Reduce Greenhouse Gas Emissions, Develop Electric Vehicle Charging Infrastructure, and Enhance Recycling Efforts in Escambia County. The county will identify and address immediate and short term measures in 2024, and will plan to invest in long term measures beginning in 2025 as informed by the outcome of the ongoing GHGI and building audits.