Status of Pinellas County Energy Conservation Efforts

Office of Resilience & Asset Management

Robert Mills, Director

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BOARD OF COUNTY COMMISSIONERS

Our Vision: To Be the Standard for Public Service in America

Pinellas County

Energy Conservation in Pinellas County

- For many years energy conservation has been a key area of improvement for Pinellas County
- A coordinated approach to energy conservation always includes a focus on return on investment
- As industries evolve, we evaluate the changes in technology to determine benefits and programs

Energy Conservation Program

ELECTRICITY

Year	Annual Billing	Annual Energy Use (kWh)	# of Accounts
2019	$17,133,128	172,271,964	1,587
2020	$16,459,697	177,546,636	1,591
2021	$16,466,904	175,271,707	1,618
2022	$19,541,075	177,523,476	1,639
2023	$23,157,796	175,523,154	1,674
2024	$20,725,815	170,942,900	1,674

$10,400

in energy efficiency rebates secured

Key Program Services:

- Tracking electric consumption and cost data
- Completing energy audits
- Predicting future utility costs based on rate adjustments
- Developing ROI analyses for energy retrofits
- Utilizing grant funding for energy retrofits
- Managing Duke Energy rebate opportunities

Evaluation of Investments

- **Projects and purchases undergo a baseline evaluation for performance and return on investment, i.e. cost-benefit**
- **Building energy audits are conducted to determine consumptive savings opportunities and equipment replacements are selected to be more energy efficient**
- **Connections to utility providers and commercial partners for opportunities, i.e. Duke Energy rebates,**
- **Research applicable grant opportunities and use of 1-time dollars to provide on-going savings**

Actions Taken

FY 23

- **Streetlight LED Conversion**
  - **Metered Arterial (1616 Lights)**
    - Saved 1,890,444 kWh a year ($128,776 After investment in new lighting)
    - ROI-1,744% per streetlight
- **CJC Energy Recovery Ventilation (ERV) Rebate**
  - **The ERV reached the end of its useful life and required replacement**
  - **$9,000 rebate from Duke for installing energy efficient equipment**

Actions Taken

FY 24

- **Urban Forestry LED Conversion project**
  - **Saved 22,043 kWh a year ($3,813 annual savings)**
  - **ROI- Return on investment was just over 1 year. Upfront equipment cost to the County was $4,000.**
- **HVAC Replacements with energy efficient equipment**
  - **The HVAC units reached the end of its useful life and required replacement(Multiple Buildings).**
  - **Secured $1400 in Duke Rebates for equipment reducing energy consumption by 16,474 kWh a year ($1,173 annual savings).**

Actions Taken

FY 24

- **Duke Energy Clean Energy Connection Program**
  - **Increased the amount of energy sourced from 40% to 56%, which exceeds our original 2030 goal by 6% (5 years early)**
  - **By year 10 of the subscription the county will have saved $132,000. Effectively recouping the cost of the subscription fees**
  - **This agreement term is through 2054. Upfront cost to the County is expected to reduce future energy cost and provide a return-on-investment of $15,180,606 by 2054.**

Actions Taken

FY 25

- **EV utilization**
  - **Pilot Study six F-150 trucks**
  - **Eighty EV Utility Carts**
- **900 Ton Chiller Replacement rebate**
  - **The Chiller had reached the end of its useful life and required replacement**
  - **$18,000 rebate from Duke energy for installing a more efficient equipment.**
  - **Reduction of 316,000 kWh a year in energy.**
- **Detention Center LED lighting conversion.**
  - **Total yearly energy saving 540,350 kWh ($490,750 after program cost)**
  - **The expected return on investment is 6 years.**

Summary

- **Energy Conservation efforts establishes framework**
- **We evaluate changes in technology or improvements for County's assets**
- **Energy Conservation efforts focus on return on investment**

Thank You

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