Executive Summary/ Introduction

The City of Palm Bay implemented its first Sustainability Master Plan in 2010, to guide the City towards a future based upon a commitment to the environment, economic health, and quality of life for their residents. The City of Palm Bay has been recognized for many sustainability efforts over the years including a Florida Green Building Coalition Green Government Designation and an ISO 14001 Environmental Management System certification for the entire Utilities Department. In February 2008, EPA identified “Effective Utility Management: The Key to Sustainability”¹; and in the same reference stated “Sound local wastewater and drinking water infrastructure is not only essential to the protection of public health, it is a foundation of robust local and regional economies.” Subsequently, the accomplishment of Sustainability Master Plan activities and effective utilities management has provided a powerful collaborative multiplier in achieving sustainability commitments.

Description of Project/ Service/ Initiative/ Activity

In 2009 Palm Bay received a grant of $904,000 under the US Department of Energy’s Energy Efficiency and Conservation Block Grant Program (EECBG) to implement projects and other initiatives that reduce total energy use and greenhouse gas emissions. Palm Bay assembled a steering committee comprised of City staff to lead these sustainability efforts and with the assistance of a consulting firm developed a comprehensive energy strategy and a Sustainability Master Plan. The Plan identified an aggressive but focused strategy to create a green economy by attracting environmental friendly businesses and growing green jobs. The City leveraged its initial EECBG allocation to jumpstart its master sustainability program and plant the seeds for larger efforts. The plan identified major program priorities and goals, numerous grants and other funds to supplement and support sustainability initiatives over the long term, and ways the City would promote sustainable stewardship of its resources.

Palm Bay identified the following implementation strategies as part of their Sustainability Master Plan:

- Green Incentives – Create financial incentives to both attract green businesses to Palm Bay and to encourage local businesses to adopt green programs
- Green Standards – Revise existing land use and development codes and develop sustainable design and construction standards and policies
- Education and Outreach – Provide training for the new green-collar workforce and promote the adoption of energy efficient technologies
- Energy Management – Establish an energy management tool across the City’s portfolio of buildings and facilities to benchmark energy and water consumptions and associated cost and to monitor progress over time

Palm Bay’s approach is designed to address all three decision making aspects of the Sustainable Triple Bottom Line (TBL): Environment, Economy, and Social Equity. The TBL expands the traditional business reporting framework to include ecological, social and financial performance to measure success. The plan also supported the EECBG program goals by focusing on measures that reduce energy consumption and related greenhouse gas emissions while optimizing the quality of services offered to the community.

Note 1: Reference EPA document 832-F-08-052, February 2008, titled “Effective Utility Management: The Key to Sustainability”
Palm Bay’s plan proposes activities that focus on where Palm Bay can maximize its sustainability efforts. Each proposed activity addresses some aspect of the triple bottom line and includes: a discussion on how it can contribute to sustainability goals, estimated timeframe for implementation and quantifiable implementation costs, energy savings and greenhouse gas emissions. Through this activity plan the City was able to outline their next steps in sustainability efforts.

In 2013, the City updated the activity plan and conducted a GHG inventory. When the City reviewed the activity plan, they updated project goals and identified next action steps to continue on this sustainability path. The GHG inventory showed the City had successfully achieved an 8.6% reduction in energy over the 2-year timeframe. The Utilities Department reduced its GHG emissions by 23.7%, which included a 16.9% reduction at the treatment plants. The Utilities Department, because of its leadership in sustainability, had been given proponency for updating the Sustainability Master Plan activities and Energy and GHG emission reductions of the City of Palm Bay municipal government operations. The City is fully committed to continuing to reduce its negative environmental impacts and create a more sustainable City.

In 2012, the City of Palm Bay Utilities Department was selected to be a Case Study in EPA’s Resource Guide to Effective Utility Management and Lean. The Resource Guide featured only four utilities from across the nation to demonstrate the integration of Lean techniques with the management areas of “Effective Utility Management: The Key to Sustainability”1. The Resource Guide is found at the following link under the paragraph titled “Tools to Implement Effective Utility Management”:

http://water.epa.gov/infrastructure/sustain/watereum.cfm

In 2013, the Utilities Department was selected to be one of only seven utilities across the nation to be a “global success” case study for utilizing the Water Environmental Federation’s - The Energy Roadmap - A Water and Wastewater Utility Guide to More Sustainable Energy Management. A link to additional information and how to obtain the document follows:

http://www.wef.org/energywater.aspx

In 2014, the City of Palm Bay was selected to participate in the 2014 Leadership STAR Community Program; it will work toward the goal of becoming a certified sustainable community. Only 20 municipalities across the nation (county and city) were chosen to participate; the City of Palm Bay was the only city in Florida chosen to participate. Additional information about the STAR Community Rating System and the Inaugural Leadership STAR Community Program is found at the link below:


Lessons Learned

The City of Palm Bay Utilities Department was the largest energy user in municipal government and because of its Environmental Management System, committed by policy and management structure to continual improvement, was looked on to provide leadership, best practices, and proponency for municipal energy and GHG reduction tracking and reporting. GHG inventory updates were determined to be optimal at the 3 year mark and sustainability action plans would be updated bi-annually. The GHG inventory updates are best done by a third party to provide transparency and the technical expertise in GHG calculation protocols.

Additional Resources

http://gogreen.palmbayflorida.org/PDFs/PB_MasterPlan_Web_v9ALT.pdf

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