MEMO

Public Utilities/Office of Sustainability

To: Mayor Muoio and City Commissioners

From: Penelope Redford, Sustainability Manager

Date: June 27, 2011

RE: Sustainability Action Plan - Draft

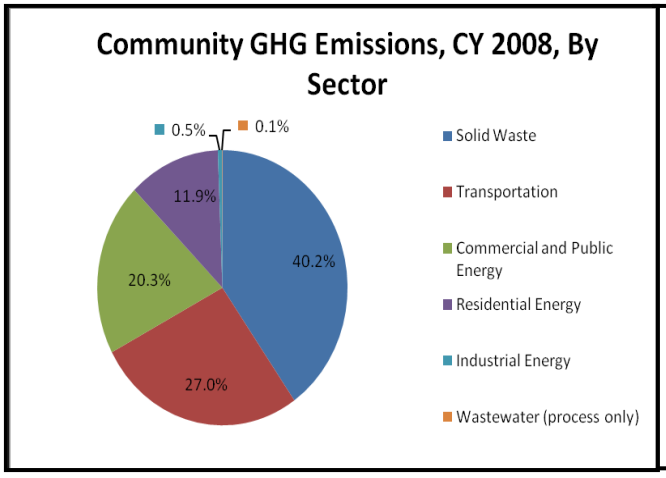
This memorandum serves as background for the development of the Draft Sustainability Action Plan ("SAP"). This Draft SAP has been developed in furtherance of a seven (7) month scope of work. We are very excited to present the culmination of this effort for final input from the City Commission, City Administration and public.

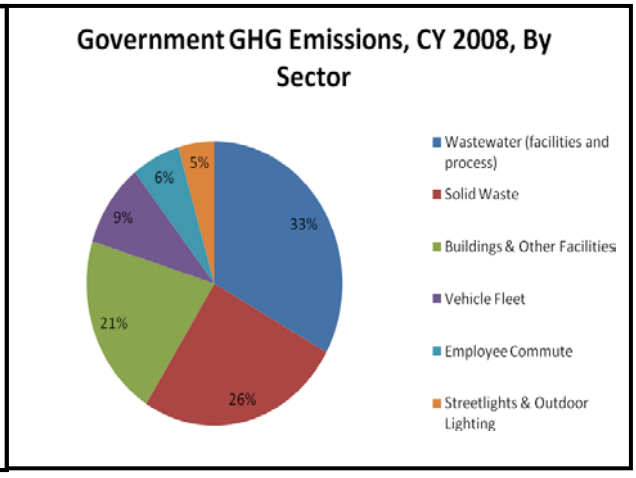
We would like to emphasize that this document is still considered a "draft" so that we can include both public and Commission input and we will be finalizing it in a more polished format. It was important to receive your feedback before placing it into a final formatted document to make the publication process more efficient.

I. The Greenhouse Gas Reduction Target

As part of this project, a Green House Gas Emissions inventory was compiled for both City Government operations and Community Wide usages to establish a baseline. 2008 was used as the baseline year.

The Draft SAP includes a 19% reduction in GHG emissions by 2018, a 32% reduction in GHG emissions by 2025 and a 37% reduction in GHG emissions by 2035 **for City Facilities and Operations**. The charts below indicate the sectors from which emissions are generated:





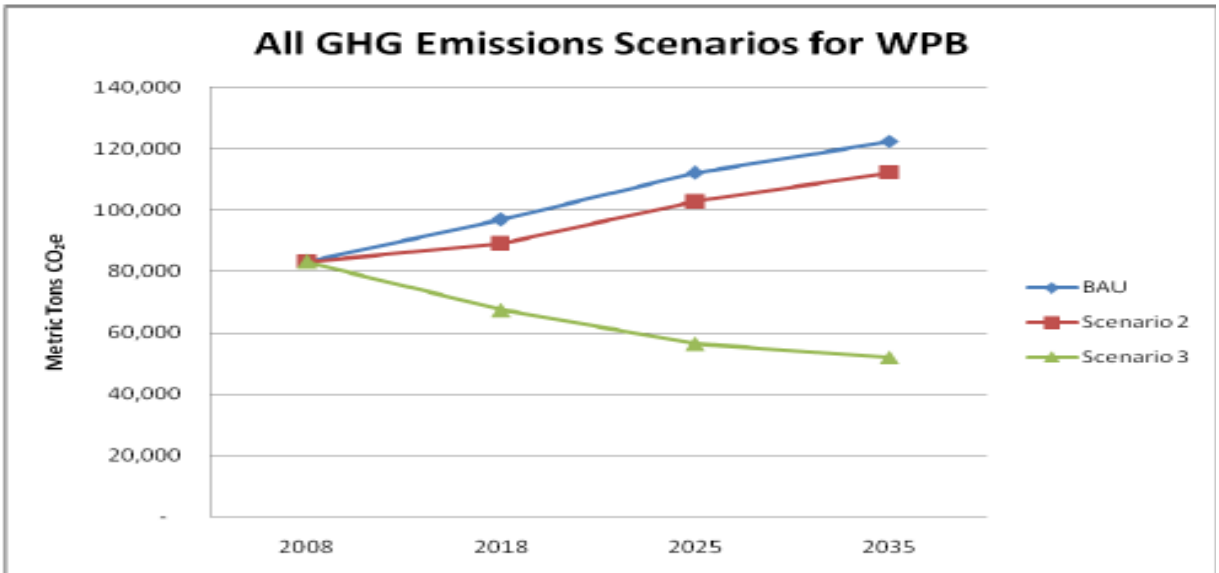
Although City Facilities and Operations represent only 3% of the overall communitywide greenhouse gas emissions, it is the most important portion to set a target for, because the City can control the energy use and efficiency of those facilities and operations. The Draft SAP is structured to achieve this target and an additional thirty-nine (39) goals. To select this greenhouse gas reduction target, a forecast for future greenhouse gas emissions was completed assuming three (3) different scenarios as follows:

1. Scenario 1: "Business as Usual": This scenario estimates future emissions under Business as Usual BAU conditions, in other words, what the emissions will be if the City were to take no action to reduce them. It estimates a projected path of GHG emissions based on population projections, future electricity generation projections, and Florida's adoption of the California Motor Vehicle Standards (in February 2009)

2. Scenario 2: The City's current Comprehensive Plan states in Policy 1.2.1, that the City has a goal "to reduce solid waste going to landfills by 30 percent between 2008-2018" Scenario 2 adjusts the BAU projections for the solid waste sector only, by incorporating this 30% reduction in waste going to the landfill.

3. Scenario 3: The third scenario estimates emissions based on requirements under Governor Crists' 2007 Executive Order 07-127. This Order establishes statewide GHG reduction targets as follows:

    - Reduce to 2000 levels by 2017;
    - Reduce to 1990 levels by 2025;
    - Reduce to 80% of 1990 levels by 2050.



	2008	2018	% Change	2025	% Change	2035	% Change
BAU	83,189	96,870	16%	112,056	35%	122,239	47%
Scenario 2	83,189	89,041	7%	102,869	24%	112,192	35%
Scenario 3	83,189	67,447	-19%	56,535	-32%	52,012	-37%

These three (3) scenarios reflect alternative actions the City could take such as the "Business as Usual" approach, the City's existing solid waste reductions goals (which are a large sector of greenhouse gas emissions for the City) or the likely direction that future greenhouse gas regulations will go. Scenario 3 reductions are virtually identical to the last three (3) major federal climate bills that included greenhouse gas reduction targets.

II. Structure of the Plan

The Draft SAP is divided into seven (7) Focus Areas with an additional section specifically related to City Operations and Facilities including:

1. Natural Resource and Water Conservation
2. Energy Efficiency and Renewable Energy
3. Land Use, Redevelopment and Transportation
4. Sustainable Buildings and Housing
5. Waste Management and Recycling
6. Growing a Green Economy
7. Urban Agriculture and Community

The Focus Areas, generally, have been developed based on several key inputs:

- All of the E4 Summits
- Existing City sustainability-related practices, projects and programs
- Results of Stakeholder Interviews and an internal Kick-Off Meeting for the project held 12/13/10
- The Sustainability Action Plan Workshop held 3/9/11

The Focus Areas either reflect a particular sector of greenhouse gas emissions (Waste Management and Recycling) or City and stakeholder priorities (Sustainable Buildings and Housing). In some instances, because of the intrinsic relationships between the issues, the Focus Areas were combined (Land Use, Redevelopment and Transportation).

III. Development of the Draft Sustainability Action Plan

The Draft SAP is premised upon:

- The Greenhouse Gas Inventory,
- The 2010 City of West Palm Beach Green Task Force Report,
- Input from E4 Summits,

- An inventory of existing practices, projects and programs (from Kick-off Meeting and later Updates) for both City Facilities and Operations and Communitywide,
- Results of the Stakeholder Interviews conducted,
- A Survey of City employees (commuting and assessments of practices to date), and
- The Workshop held 3/9/11.

We also did extensive research on best practices from numerous sustainability, climate and energy conservation plans in Florida and across the Country. Overall, the Draft SAP identifies the City's existing sustainability-related efforts and builds upon them, frames the issues, establishes goals, defines the actions, recognizes challenges and shows opportunities for success.

IV. Structure of the Draft Sustainability Action Plan

Within each Focus Area there is an Implementation Strategy including specific **Goals, Targets/Trends** and **Indicators** where feasible. This Implementation Strategy Actions are then identified to reach the target. Each Focus Area then includes a section called "**Path to Success**" providing an overview, or assessment, of challenges to implementation and opportunities to overcome those challenges. The Path to Success discussion includes suggested timeframes, funding (where appropriate), and a discussion of implementation partners where applicable and challenges and opportunities to achieving success. Education and Outreach recommendations are included where appropriate in this Section.

Appendix A includes a consolidated list of the Goals, Targets/Trends and Indicators but expands that list into the overall **SAP Implementation Strategy**, which includes actions and timeframes. **Actions** are then identified to reach the Target/Goals. The identification of a **Timeframe** was based on the ease with which the Goal or Target could be implemented based on such factors as whether or not: it was a new initiative, there was a clear responsible Department or party to implement it, there was a related case study that could expedite its implementation and there funding was a challenge. The SAP Implementation Strategy will be finalized within five (5) months of adoption of the SAP to assure adequate City Staff and Stakeholder input. During that time City Departments will review and provide action items, persons of responsibility and other comments. The implementation Strategy will then be presented again for final revisions and approval.

On an annual basis, the Sustainability Advisory Committee, City Administration and the City Commission will receive a **Progress Report** from the Office of Sustainability detailing all successes, trends and areas for improvement in the SAP. The Progress Report will illustrate progress on Goals, Targets/Trends and Indicators. The Progress Report is a longer more detailed update on the SAP based upon the progress made relative to each Goal. The Progress Report will be used to create the **Annual Report Card**, in shorter summary format, for wider distribution within the City and the surrounding community through the local media, sustainability web site, and community organizations. It is the intent of the Annual Report Card to share successes and challenges with the overall community and to inspire others to follow our example. It is also anticipated that no less than every three (3) years, the City will revisit and updated the GHG Inventory as part of this annual process. Sharing information and networking with the larger community are absolutely critical for the success of our efforts.

V. **Highlights of Goals.**

Within the Focus Area (including the additional City Operations and Facilities section), the forty (40) SAP goals are as follows:

City Operations and Facilities:

CF 1.0: Optimize the management, planning & maintenance of assets to reduce GHG emissions in City Operations and Facilities and implement landscaping and facility renovations that reduce energy demand and maintenance costs.

CF 2.0: Embed sustainability principles into all decision-making and planning across the City.

CF 3.0: Modify procurement policy to integrate "green" standards in purchasing for services and products.

CF 4.0: Reduce fuel use of City's fleet.

CF 5.0: Reduce GHG emissions from employee commuting by promoting workplace flexibility and increasing telecommute and alternate workplace participation rates.

CF 6.0: Highlight City's Sustainability commitment through education, awards and designations.

CF 7.0: Decrease City's resource consumption of office products and packaging.

CF 8.0: Prepare City to be resilient for the impacts of climate change.

1. Natural Resource and Water Conservation

NR 1.0: Improve and implement stronger water conservation measures.

NR 2.0: Differentiate urban ecosystem as an appreciation asset that supports sustainable development.

NR 3.0: Maximize protection of Grassy Water Preserve and determine the carbon offset value of the City's natural assets in achieving its GHG Target.

NR 4.0: Improve water quality and manage stormwater as a resource.

NR 5.0: Increase multiple uses of open space by maximizing resource efficiency of parks and public property.

NR 6.0: Reduce use of chemicals entering natural areas and water supply.

2. Energy Efficiency and Renewable Energy

E 1.0: Diversify energy sources and build the energy economy.

E 2.0: Promote a "cultural shift" to save money and reduce carbon emissions.

E 3.0: Develop "Best Practices" tool kit.

E 4.0: Highlight available and pending incentives for energy retrofitting and renewable energy deployment.

E 5.0: Diversify energy sources and build the energy economy.

3. Land Use, Redevelopment and Transportation

LU 1.0: Make cycling, walking, public transit, and other sustainable mobility modes the mainstream.

LU 2.0: Encourage and incentivize land uses and density to facilitate development and redevelopment opportunities linked to transit.

LU 3.0: Accelerate implementation of the City's Bicycle and Pedestrian Plans and continue efforts to make walking and cycling safe, healthy, and enjoyable alternatives to driving.

LU 4.0: Manage parking effectively to minimize driving demand and encourage and support alternatives to driving.

LU 5.0: Create incentives for low-carbon vehicles such as electric vehicles and plug-in hybrids.

LU 6.0: Create sustainable design standards for transportation projects and systems.

4. Sustainable Buildings and Housing

SB 1.0: Encourage innovative strategies that minimize energy and water consumption, maximize the recycling of construction debris, and make for a more comfortable indoor environment.

SB 2.0: Integrate housing and redevelopment programs to achieve common goals.

SB 3.0: Realize cost- effective, whole-building solutions that reuse buildings, keep the historic fabric of buildings and structures intact and improve the energy performance of the building.

SB 4.0: Simplify project review and permit approval process to encourage innovative green building measures.

SB 5.0: Provide meaningful incentives to encourage green and energy efficient building practices.

SB 6.0: Reduce dependence upon chemicals and unnatural substances in building and construction.

5. Waste Management and Recycling

WM 1.0: Enhance recycling, composting, and source reduction services for residential and non-residential buildings.

WM 2.0: Create C&D recycling program that results in high levels of reused materials.

WM 3.0: Make recycling and composting mandatory at public events and provide more public recycling containers.

6. Growing a Green Economy

GE 1.0: Form a green jobs /economic development program to create new opportunities for clean energy a tech trades.

GE 2.0: Recognize and celebrate the environmental leadership of local businesses, business associations, and community groups.

GE 3.0: Develop incentives to attract green businesses and create green jobs.

7. Urban Agriculture and Community Gardens

UA 1.0: Provide common gardens in interested neighborhoods.

UA 2.0: Complete a food-system assessment and specific plan to promote urban agriculture and community gardens with goals and targets.

UA 3.0: Create a partnership with not-for-profits, for-profits, business associations and others to develop incentives that work to encourage urban farms and agricultural opportunities.

VI. **Outreach for Draft Plan Development**

Our outreach strategy for the development of this Draft SAP has been ongoing over multiple years and we received a significant amount of feedback from those who attended the outreach events.

- Kick-Off meeting December 13, 2010
- Stakeholder Interviews conducted (primarily conducted 2/9-10/11 with other follow-up interviews conducted afterwards)
- Workshop held 3/9/11
- Sustainability Advisory Committee 4/12/11
- Earth Day Event 4/16/11
- Sustainability Advisory Committee 6/7/11

VII. Conclusions

We feel the Draft SAP is achievable and will put the City on a path to achieve greenhouse gas reductions consistent with levels of reduction being discussed at the Federal level through previous legislative, and potentially future, proposals. We welcome this opportunity to receive feedback from the Commission, community and staff on the Draft SAP, which we will then finalize for adoption by the Commission.