

**CITY OF FORT LAUDERDALE
SUSTAINABILITY ADVISORY BOARD
CITY HALL CITY COMMISSION CHAMBERS – 1ST FLOOR
100 NORTH ANDREWS AVENUE
FORT LAUDERDALE, FLORIDA
APRIL 25, 2011 – 6:30 P.M.**

Members	Attendance	Cumulative Attendance 1/2011 through 12/2011	
		Present	Absent
Jon Albee, Chair	P	4	0
Alena Alberani, Vice Chair	P	4	0
Anthony Abbate	P	4	0
Alexandra Anagnostis	A	2	2
Jaime Castoro	A	3	1
Vicki Eckels	P	4	0
William Goetz	P	4	0
Donna Guthrie	A	1	3
Dana Pollitt	P	2	1
Rebecca J. Walter	A	3	1

Also Present

Todd Hiteshew, Staff Liaison, Environmental Services Manager
D'wayne Spence, Assistant City Attorney
Nadia Locke, resident
J. Opperlee, Recording Secretary, ProtoType, Inc.

Communications to the City Commission

None

1. Call to Order

The meeting was called to order at 6:31 p.m. by Chair Albee.

2. Roll call – Introductions

Roll was called and it was determined a quorum was present.

3. Approval of Meeting Minutes – March 2011

Mr. Abbate noted a change to the minutes.

By unanimous consent, the Board approved the minutes of their March meeting as amended.

4. Staff Liaison Report

- Action Items

Mr. Hiteshew informed the Board that the Climate Agreement had been signed and mailed. The Mayor and City Auditor were still discussing Budgeting for Outcomes. No action had been taken on the Clean Air Act letter due to lack of consensus. The revised ordinance language would be discussed by the Commission on their May 3 conference agenda.

Mr. Hiteshew stated the Smart Watts Program would kick off on Wednesday, April 27. Ms. Alberani said this program was funded by the EECBG and was open to Fort Lauderdale Residents. Ms. Eckels had attended one of the workshops and reported the materials were well presented.

Dr. Goetz said he had discussed the ordinance revision with Mr. Spence, and he understood that if the City Attorney had an objection, the Board may never know about it. Dr. Goetz Suggested that Mr. Spence, Ms. Naigur and himself should draft an explanation describing why the change was important. Mr. Spence could present this to Mr. Stewart to see if he had any objection prior to putting this on the Commission's conference meeting agenda. Mr. Spence said the City Attorney felt the language was too broad and the term "Social Equity" was not defined. Ms. Naigur felt the City Attorney's objection could delay everything. She noted that the focus should be more on implementation.

Chair Albee said the Board had authorized him to meet with the City Manager and others for discussion, and he felt Dr. Goetz should have a discussion regarding this issue.

Motion made by Mr. Abbate, seconded by Ms. Eckels, to authorize Dr. Goetz to discuss this with the City Attorney's office. In a voice vote, Board unanimously approved.

5. New Business

- Heike Naigur, Energy Manager

Ms. Naigur gave a Power Point presentation, a copy of which is attached to these minutes for the public record.

Regarding Assessment of Benefits, Ms. Naigur said she had ranked projects by costs and payback that could be used for prioritization. Dr. Goetz asked if the net return on investment had been included, and Ms. Naigur said this information might not be available for all action items. She invited the Board's input for additional metrics to incorporate. Dr. Goetz suggested including the cost of implementing an initiative versus not implementing an initiative. He stated the risk of an initiative's failure should be included as well.

Dr. Goetz noted that the greenhouse gas reduction targets did not take the lifecycle into account, i.e., it did not include the impact of producing more energy efficient vehicles, which could actually outweigh the benefits. Ms. Naigur said she would not recommend doing that at this point because they did not know enough about lifecycle emissions and they wanted to get started.

Mr. Abbate stated the FPL power plant at Port Everglades ranked in “the top 10% in terms of dirtiest, worst facilities in the United States, in the areas of total environmental releases, cancer risk, non cancer risk as well as air releases of recognized carcinogens.” He thought they must make these other issues known and/or address them. Ms. Naigur agreed.

Regarding recycling programs for businesses, Ms. Naigur stated she believed these were already in place, and asked if the Board was recommending expansion of the existing program. Ms. Eckels explained there was an ordinance for multi-family buildings, but there was no requirement for commercial businesses to recycle. Ms. Naigur suggested this recommendation be rephrased to be clearer. Ms. Eckels stated Parks and Recreation was supposed to be initiating recycling in the beach picnic area but she had found only one recycling container on a recent visit to the beach.

Regarding the Built Environment goals, Mr. Abbate stated that making 10% of all City buildings Greener was a weak goal and lacked a quantitative measurement. He recommended making all City buildings 100% Greener was a better goal. He suggested that the net zero that the Federal government is implementing would be a goal to look at. Mr. Abbate suggested more study on this item. He also recommended requiring all new construction to be Green per the Florida Green Building Initiative or LEED.

Regarding the Built Environment Planning section, Mr. Abbate said Housing and Urban Development, the Environmental Protection Agency and the Federal Transit Administration had created a Livability Initiative to bring together these facets of planning, and he suggested this could be used as a general guide. The Florida Department of Transportation had developed a manual for developing livable infrastructure that they could also use. Dr. Goetz stated the Metropolitan Planning Organization had committed 20 – 25% of their funds to bicycle and pedestrian intermodal transport. Ms. Eckels remarked that the Town of Davie Green Committee had developed a comprehensive Green building checklist.

Ms. Naigur asked about multi-family recycling, and Ms. Eckels explained that because the City does not enforce its 15+ year old Ordinance and multi-family recycling is not 100% compliance, it should still be listed as a goal, not as “in place.”

Mr. Abbate thanked Ms. Naigur for bringing together the SAP and the Board’s recommendations. He agreed they must have a unified approach. Mr. Abbate stated

the big challenge was the adaptability/resilience sea level rise issue “because it’s not a pretty picture and it affects...the most valuable constituency in terms of real estate values.” Ms. Alberani felt the insurance industry was aware of this issue and suggested they form a public/private venture to identify the impacts and effects of climate change and sea level rise on the City.

- Sustainability Mission Statement

Ms. Alberani suggested the Board revisited this at every meeting until they developed it.

6. Old Business

- Air Quality update - Alexandra Anagnostis-Irons

Ms. Anagnostis was absent.

7. Communications to the City Commission

None.

8. Public Comment

Ms. Nadia Locke, resident, reminded the Board that the Broward County Climate Change Task Force was already working on the climate change issues, and even though it was challenging, the City could capitalize on their efforts.

Other Items and Announcements

Chair Albee informed the Board that he had met with Mr. Hiteshew and Albert Carbon, Public Works Director, pursuant to the direction of the Board. Chair Albee said, “Bottom line is, there is money available somewhere, but it’s pledged.” He stated in order for the Board to be successful, it was necessary for them to “pick a target” and then go after that target as a Board. He acknowledged that not much could happen until the New City Manager was selected.

Regarding the agenda, Chair Albee stated it was up to him to establish the agenda, but he invited Board members’ suggestions. Mr. Hiteshew suggested Board members submit a brief title and overview of any suggested agenda item.

Dr. Goetz said the City’s reserves were approximately \$70 million and he suggested they could seek some of these funds.

Ms. Eckels said Chair Albee’s conversation with Mr. Carbon was the result of the letter she had written regarding the utilization of recycling revenue. Chair Albee said this had not been addressed at his meeting with Mr. Carbon; the purpose of the meeting was primarily to begin the conversation. He said they would get to that issue in the future.

Ms. Alberani announced that Michael Madfis, former Board member, had been nominated for two Sustainable Florida awards.

9. Adjournment

With no further business to come before the Board at this time, the meeting was adjourned at 8:10 p.m.

Next meeting date: May 23, 2011

Attachments:

Minutes – March 2011

[Minutes prepared by J. Opperlee, Prototype, Inc.]

City of Fort Lauderdale Sustainability Action Plan v2.0

Presented by:
Dr. Heike Naigur
Chief Environmental Scientist
Carbon Solutions America
heike@emailcsa.com



Sustainability Planning Process





Sustainability Planning Process

Understand



- SAP v1: GHG Inventory
- Energy Reduction Strategy

Connect



- Outreach
- Education

Agree



- Prioritize
- Combine Reports

Target



- Forecast
- Targets

Act



- Find funding & implement
- Monitor



Energy Manager - Scope of Work

Task 1: ENERGY PLANNING

- Establish Team and Communication Strategy
- Energy Reduction Strategy and Report
- Energy Reduction Strategy Document
- Energy Master Plan
- Status: 22%

Task 2: FUNDING AND GRANTS

- Grant and Funding Application Assistance
- Technical Service Assistance
- Legislation tracking
- Status: 15%

Task 3: MONITORING AND REPORTING

- Smart Watts Program Administration Assistance
- Monitor City Green Initiatives (including ICLEI)
- Local Green Government Certification
- Status: 49%

Task 4: EDUCATION AND OUTREACH

- Stakeholder Coordination/City Rep.
- Education and Outreach Plan (website)
- Status: 20%

Project completed: January 2012



SAP v2 – Combine Recommendations



GHG Inventory
Energy
Water
Built Environment
Transportation
Waste
Adaptation
Communication
Green Jobs
Funding Ops
Monitoring



Air Quality
Water
Waste
Natural Env. &
Landscape
Built Environment
Education
QA & QC
Transportation

Sustainability Report
City of Fort Lauderdale
Citizens Sustainability Green Committee

"We do not inherit the earth from our ancestors, we borrow it from our children."
-Native American Proverb



October 2010

Air Quality
Energy
Water
Built Environment*
Transportation
Waste
Adaptation
Outreach &
Education
Green Jobs
Leadership &
Funding
Monitoring/QA &
QC

**to include Natural Env. & Landscape*



SAP v2.0 – Assessment of Benefits

1	> \$1,000,000	1	> 2 FTE	1	> 15 years	1	> 5 Years	1	> 4,000 hrs
2	\$100,000 – \$1,000,000	2	1 to 2 FTE	2	10 to 15 years	2	2-5 years	2	1,200 – 4,000 hrs
3	\$10,000 – \$100,000	3	1/2 to 1 FTE	3	5 to 10 years	3	1-2 years	3	200 – 1,200 hrs
4	\$100 – \$10,000	4	1/10 to 1/2 FTE	4	2 to 5 years	4	6-12 months	4	40 – 200 hrs
5	< \$100	5	< 1/10 FTE	5	< 2 years	5	< 6 months	5	< 40 hrs

Implement. Costs [\$]	O&M Costs [\$]	Simple Payback [years]	Time Horizon [years]	Staff Effort [months or hours/year]
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Govern. Control []	GHG Avoided [tons/year]	Energy Saved [kWh/year]	Waste diverted [lbs/person /year]	Health Improv. []
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1	No control	1	< 100 tons/yr	1	< 1000 kWh/yr	1	< 50 lbs/person/yr	1	None
2	Programs (no incentives)	2	100-1000 tons/yr	2	1,000-10,000 kWh/y	2	50-100 lbs/person/yr	2	Mostly not
3	Programs (with incentives)	3	1000-10000 tons/yr	3	10,000-100,000 kWh	3	100-200 lbs/person/yr	3	Neutral
4	General influence	4	10,000-100,000 tons/y	4	100 - 1,000 MWh/yr	4	200-300 lbs/person/yr	4	Several improv.
5	Full responsibility	5	> 1 million tons/yr	5	> 1,000 MWh/yr	5	> 300 lbs/person/yr	5	Significant.

AIR QUALITY



AIR QUALITY GOALS (SAP v1):

- N/A

AIR QUALITY GOALS (Citizen Report):

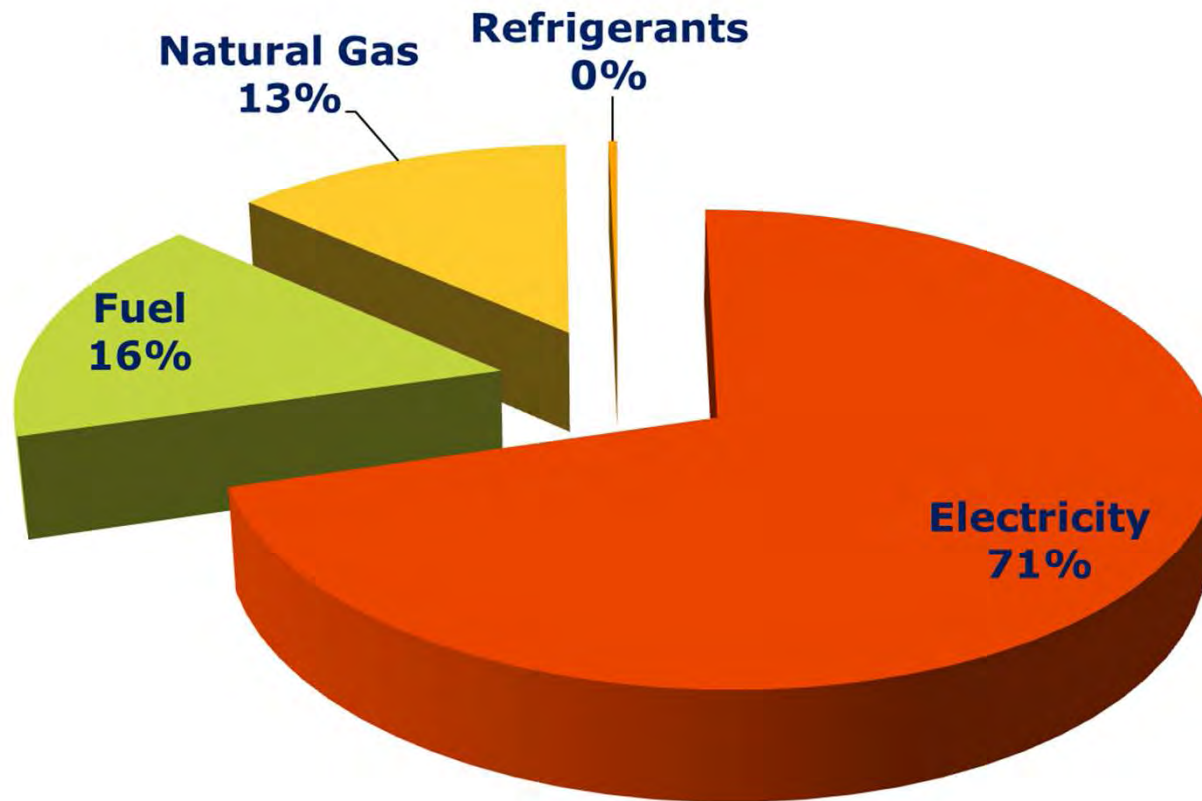
- ★ Reduction of GHG emissions below 1997 levels by 2015.
- Advocate for a Statewide Ban of Onboard Incineration on Cruise Ships within a Specific Distance from the Coast



AIR QUALITY – GHG Inventory (City)



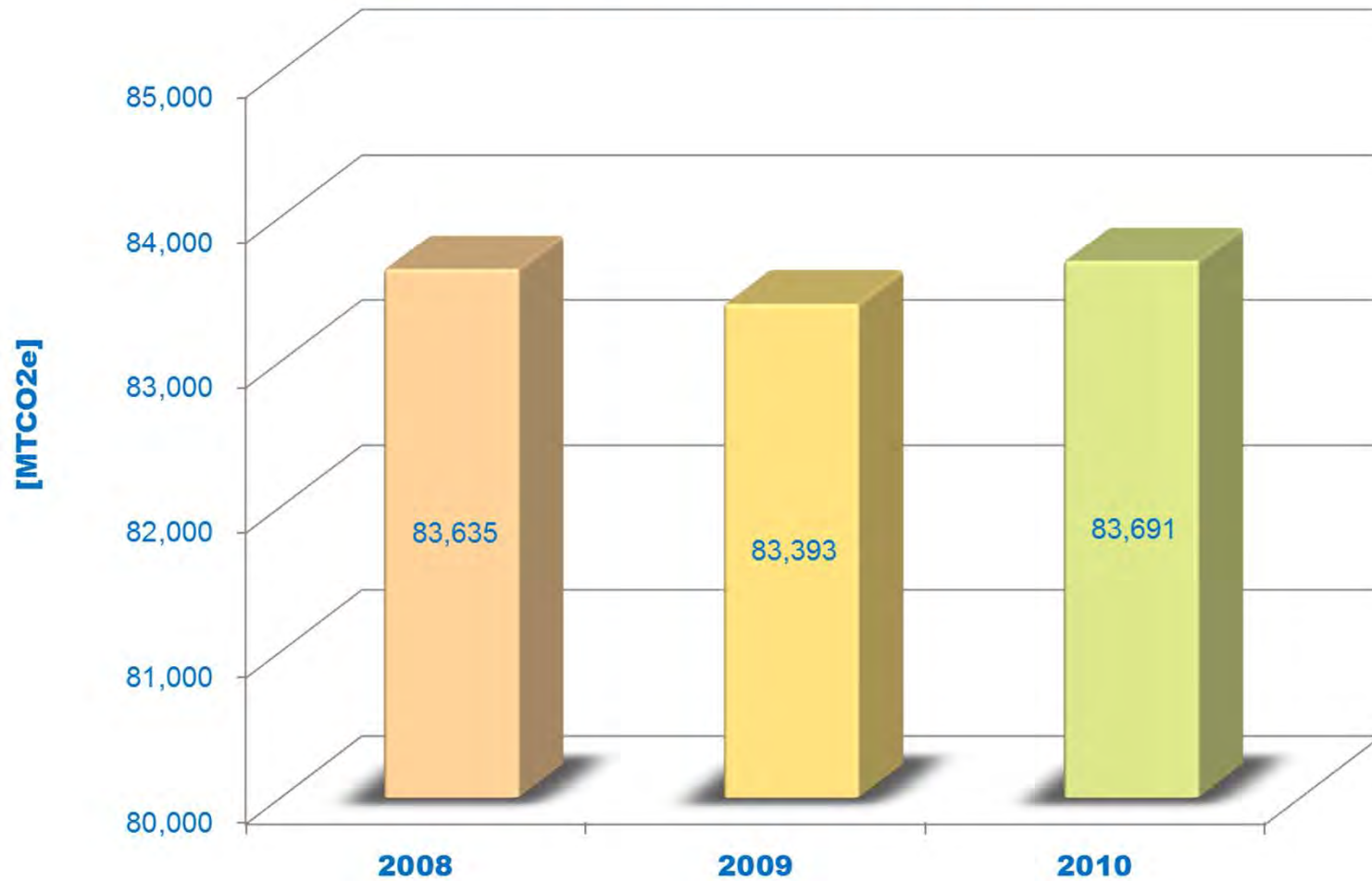
2010 GHG Emission Sources



AIR QUALITY – GHG Inventory (City)



Greenhouse Gas Emissions 2008-2010



AIR QUALITY – Recommended Goal



AIR QUALITY GOALS (SAP v2):

- Reduce GHG emissions from city operations by 15% below 2010 levels by 2015.

BAU	Base Year	Year 2	Change from Base Year	Goal Year	Change from Base Year
	2010	2011	%	2015	%
City Operations [MTCO ₂ e]	83,691	83,988	0.4%	85,177	1.8%
GOAL: 15% below 2010 by 2015.	Base Year	Year 2	Change from BAU	Goal Year	Change from BAU
	2010	2011	%	2015	%
Goal Year Target [MTCO ₂ e]	83,691	81,180	-3.0%	71,137	-15.0%

Notes:

- Reduction potential in 2015 from electricity: 6% [MTCO₂e]



SAP v2: AIR QUALITY



AIR QUALITY GOALS (SAP v2):

● Goal 1: Reduce GHG Emissions

- Reduce GHG emissions from city operations by 15% below 2010 levels by 2015. (*Equals 11% Reduction below 1997 levels*)
- Reduce GHG emissions from community wide activities by **x% by 20xx.**
- Advocate for a Statewide Ban of Onboard Incineration on Cruise Ships



ENERGY



ENERGY GOALS (SAP v1):

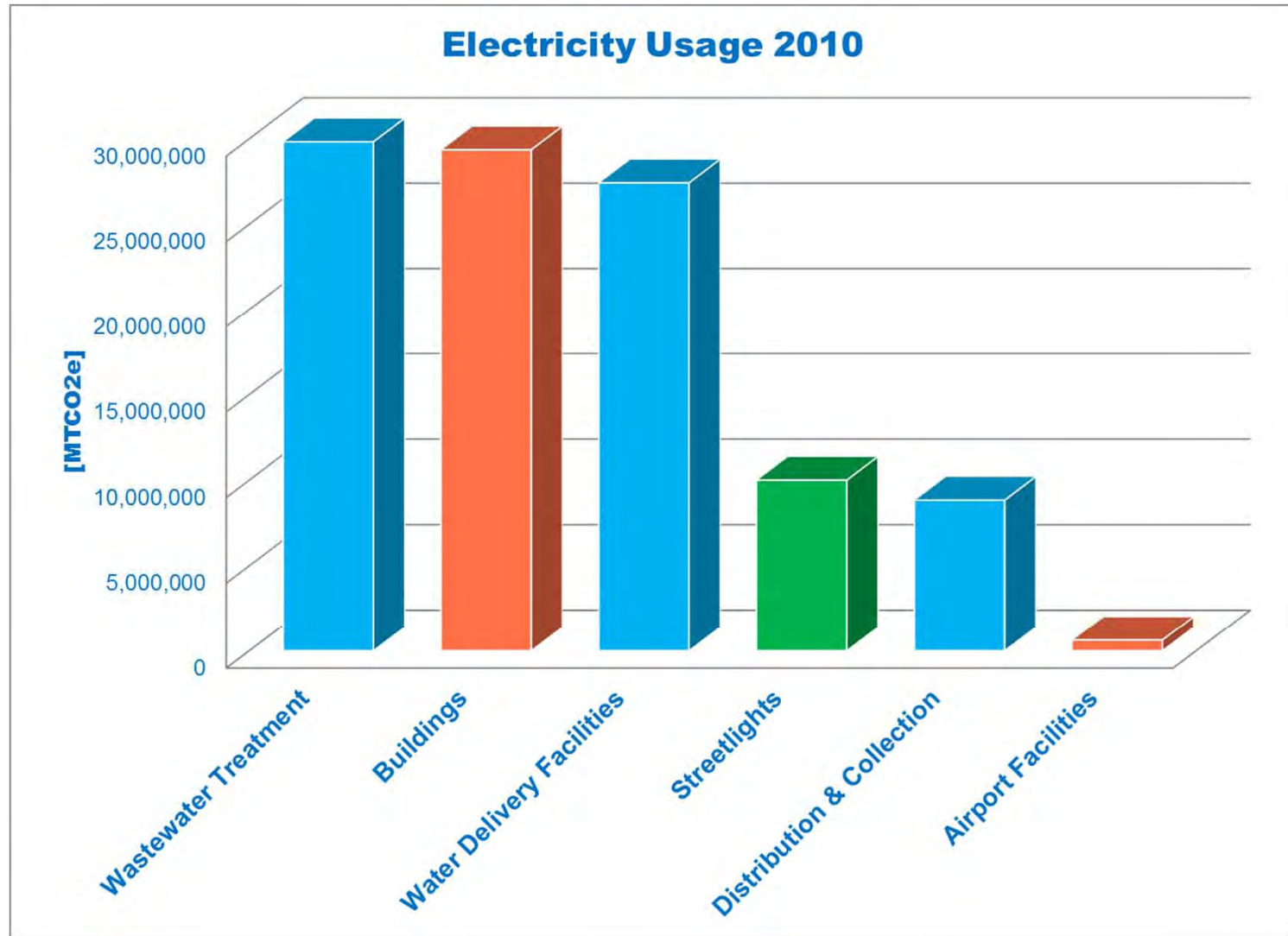
- Reduce energy demand
- Encourage use of renewable energy
- Formalize energy sustainability into planning process
- Raise awareness of energy and climate change issues

ENERGY GOALS (Citizen Report):

- N/A



SECTOR: ENERGY - *Baseline*



SECTOR: ENERGY - *Baseline*



Account #	Address	2010 kWh	% of Base Year	2011 GOAL
Highest User				-2.7%
sum GTL WWTP	1500 SE 18TH ST	27,794,400	28.6%	
Fiveash WTP	4301 NW 9TH AVE	15,570,400	16.0%	
Wellfield	3401 W PROSPECT RD	5,419,800	5.6%	
WTP State Rd	1500 S STATE ROAD 7	5,129,280	5.3%	
Police HQ	1300 W BROWARD BLVD	5,006,400	5.2%	
City Hall	100 ANDREWS AVE	3,397,200	3.5%	
Parking Garage	100 SE 1st Avenue	2,044,140	2.1%	
Sewage Pump	4000 NE 25TH AVE	1,746,604	1.8%	
ISHOF	501 Seabreeze Blvd.	1,106,940	1.1%	
Fire Station 2	528 NW 2nd Street	958,680	1.0%	
Holiday Park Memorial	800 NE 8th Street	843,850	0.9%	



SECTOR: ENERGY - Target



ENERGY GOALS (SAP v2):

- Goal 1: Reduce Electricity Demand by 5% below 2010 baseline by 2015.

BAU	Year 1	Year 2	Change from Base Year	Year 6	Change from Base Year
	2010	2011	%	2015	%
City Operations [kWh]	106,010,511	106,724,106	1%	109,578,486	3%
GOAL: 5% below 2010 by 2015.	Base Year	Year 2	Change from BAU	Goal Year	Change from BAU
	2010	2011	%	2015	%
Goal Year Target [kWh]	106,010,511	104,950,406	-2%	100,709,985	-5%

Notes:

- Approx. 2% increase per year
- Actual reduction in 2015:
 - 8% [kWh]
 - 6% [MTCO₂e]



ENERGY Goals Benefits 1-5



ENERGY GOALS SAP v2	PRIORITY	SCORE	1. Impl. Costs	2. O&M Costs	3. Simple Payback	4. Time Horizon	5. Staff Effort
			1 - HIGH 5 - LOW	1 - HIGH 5 - LOW	1 - LONG 5 - SHORT	1 - LOW 5 - HIGH	1 - LONG 5 - SHORT
			1 >\$1 million 2 \$1k-\$1 million 3 \$10k-\$100k 4 \$1k-\$10k 5 <\$1k	1 >2 FTE 2 1 to 2 FTE 3 1/2 to 1 FTE 4 1/10 to 1/2 FTE 5 <1/10 FTE	1 >15 yrs 2 10 to 15 yrs 3 5 to 10 yrs 4 2 to 5 yrs 5 <2 yrs	1 >5 Years 2 2-5 years 3 1-2 years 4 6-12 months 5 <6 months	1 >4,000 hrs 2 1,200-4,000 hrs 3 200-1,200 hrs 4 40-200 hrs 5 <40 hrs
Goal 1: Reduce Electricity Usage by 5% below 2010 baseline by 2015.							
Objective: Establish prioritized list of electricity reduction projects within City operations by 2012.	1	32	4	5	3	5	4
Objective: Set Energy Goals for New Buildings.	2	28	5	4	3	3	3
Objective: Formulate strategy of community electricity reduction using results from Smart Watts program.	3	26	4	4	3	3	3
Objective: Identify financing mechanisms.	4	25	3	3	3	3	2
Goal 2: Source 10% of electricity from renewable energy by 2015.							
Objective: Create Solar Project Incentives.	1	29	3	3	2	4	3
Objective: Implement one solar project per year.	2	28	2	3	2	4	3
Objective: List Renewable Energy Systems on MLS.	3	26	3	4	2	2	4
Objective: Provide financial programs.	4	23	2	2	2	1	2
Objective: Test Reliability.	5	18	2	1	1	1	1

ENERGY Goals Benefits 6-10



ENERGY GOALS SAP v2	PRIORITY	SCORE	6. Gov. Control	7. GHG Emissions avoided	8. Energy saved	9. Landfill Waste diverted	10. Health improvem.	
			1 - LOW 5 - HIGH	1 - LOW 5 - HIGH	1 - LOW 5 - HIGH	1 - LOW 5 - HIGH	1 - None 5 - Significant	
			1 No control	1 <100 tons/yr	1 <1000 kWh/yr	1 <50 lbs/person/yr	1 None	
			2 Programs (no incentives)	2 100-1000 tons/yr	2 1,000-10,000 kWh/yr	2 50-100 lbs/person/yr	2 Mostly not	
			3 Programs (with incentives)	3 1000-10000 tons/yr	3 10,000-100,000 kWh/yr	3 100-200 lbs/person/yr	3 Neutral	
			4 General influence	4 10,000-100,000 tons/yr	4 100 - 1,000 MWh/yr	4 200-300 lbs/person/yr	4 Several improv.	
			5 Full responsibility	5 >1 million tons/yr	5 >1,000 MWh/yr	5 >300 lbs/person/yr	5 Significant.	
Goal 1: Reduce Electricity Usage by 5% below 2010 baseline by 2015.								
Objective: Establish prioritized list of electricity reduction projects within City operations by 2012.	1	32		5	1	1	1	3
Objective: Set Energy Goals for New Buildings.	2	28		4	1	1	1	3
Objective: Formulize strategy of community electricity reduction using results from Smart Watts program.	3	26		4	1		1	3
Objective: Identify financing mechanisms.	4	25		5	1	1	1	3
Goal 2: Source 10% of electricity from renewable energy by 2015.								
Objective: Create Solar Project Incentives.	1	29		5	2	2	1	4
Objective: Implement one solar project per year.	2	28		5	2	2	1	4
Objective: List Renewable Energy Systems on MLS.	3	26		2	2	2	1	4
Objective: Provide financial programs.	4	23		5	2	2	1	4
Objective: Test Reliability.	5	18		5	1	1	1	4

SAP v2: ENERGY



ENERGY GOALS (SAP v2):

- **Goal 1: Reduce Electricity Usage by 5% below 2010 baseline by 2015.**
 - **Objective: Establish prioritized list of electricity reduction projects within City operations by 2012.**
 - **Objective: Set Energy Goals for New Buildings.**
 - **Objective: Formulize strategy of community electricity reduction using results from Smart Watts program.**
 - **Objective: Identify financing mechanisms.**



SAP v2: ENERGY



ENERGY GOALS (SAP v2):

- **Goal 2: Source 10% of electricity from renewable energy by 2015.**
 - **Objective: Create Solar Project Incentives.**
 - **Objective: Implement one solar project per year.**
 - **Objective: List Renewable Energy Systems on MLS.**
 - **Objective: Provide financial programs.**
 - **Objective: Test Reliability.**



SAP v2: ENERGY



*Preview
Scorecard.*



ENERGY



2008 2009 2010 **2011** 2012 2013

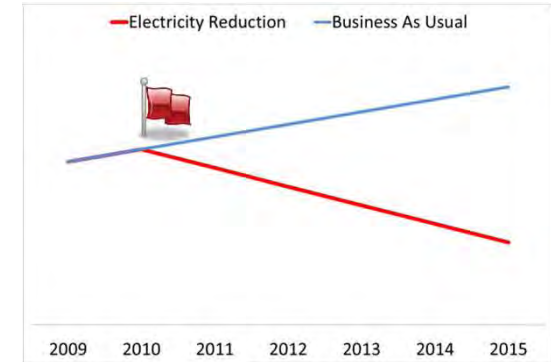
GOAL

● Act Now ● Half Way ● On Track

- Goal 1:** Reduce Electricity Usage by 5% below 2010 baseline by 2015.
Goal 2: Source 10% of electricity from renewable energy by 2015

OBJECTIVES

- Efficient Use of Municipal Energy.
- Efficient Use of Community Energy.
- Create Incentives to Use Renewable Energy.
- Improve Use Renewable Energy.



NEXT STEPS

- Develop long-term goals for City and Community to reduce energy demand.
- Find funding to install renewable energy beyond 2012.

SITUATION

Energy Manager identifying measures to reduce energy by 1% by 2012.

Barriers: Cost of projects

BUDGET

Budget: \$ \$\$ \$\$\$
 Budget Secured: **Yes** No

PARTIES INVOLVED

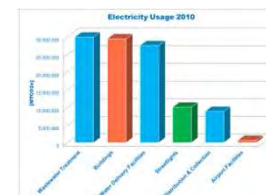
Environmental Services Manager
 Energy Manager
 Public Works Department

ACTIVITIES

- Energy Reduction Strategy (9/2012)
- Smart Watts (until 9/2012)

TRENDS

Energy Baseline 2010



Account #	Address	2010 kWh	% of Base	2011 GOAL
Highest User				
Sum GTL WWTP	1500 SE 18TH ST	27,794,400	28.6%	-2.7%
Fivewash WTP	4301 NW 9TH AVE	15,570,400	16.0%	
Wellfield	3401 W PROSPECT RD	5,419,800	5.6%	
WTP State Rd	1500 S STATE ROAD 7	5,329,200	5.3%	
Police HQ	1300 W BROWARD BLVD	5,006,400	5.2%	
City Hall	100 ANDREWS AVE	3,897,200	3.5%	
Parking Garage	100 SE 1st Avenue	2,084,140	2.1%	
Sewage Pump	4000 NE 25TH AVE	1,746,604	1.8%	
ISHOF	501 Seabreeze Blvd.	1,106,940	1.1%	
Fire Station 2	528 NW 2nd Street	958,680	1.0%	
Holiday Park Memorial	800 NE 8th Street	843,850	0.9%	



General Updates

(no analysis yet, due September 2011)



WATER (old goals)



WATER GOALS (SAP v1):

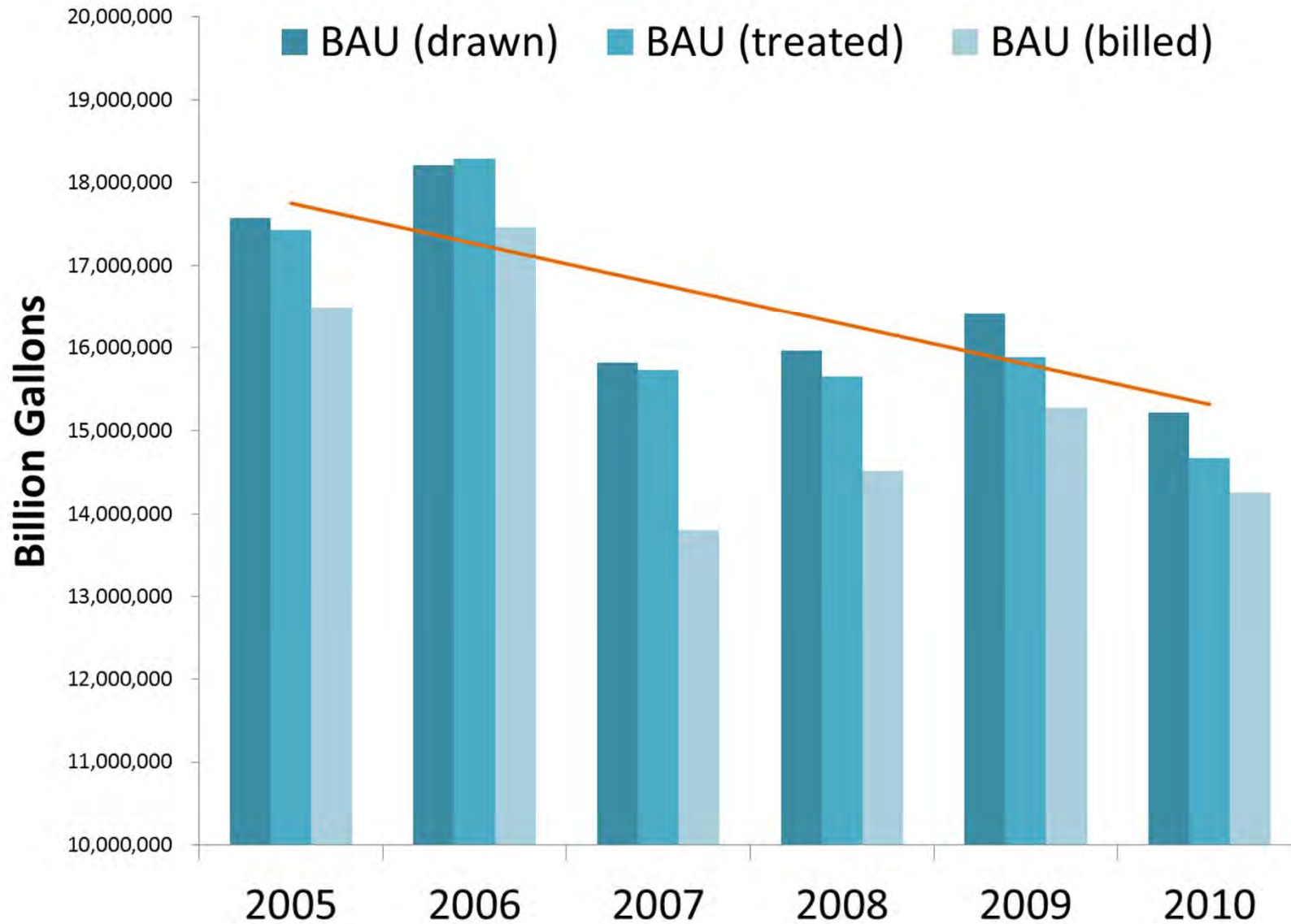
- Conservation Action Plan
- Water Conservation in Buildings
- Develop partnerships
- Foster Outreach and Education

WATER GOALS (Citizen Report):

- ★ Continue High-User Potable Water Fees (2.1)
- Discontinue New Construct. of Dual Water Metering (2.2)
- Sanitary Sewer – Inflow & Infiltration (I&I) Mitigation (2.3)
- Improve Specific Storm Inlets to Enhance Pretreatment (2.4)
- Stormwater Runoff Pretreatment Requirements (2.5)
- Study Wastewater Plant (2.6)
- Bio Retention Swales in Urban Areas (2.7)



SECTOR: Water - *Baseline*



SAP v2: WATER



WATER GOALS (SAP v2):

- Goal 1: Reduce Water Demand by **x%** each year by 2015.
 - Incentivize and encourage water conservation in buildings.
 - Implement strong target based conservation action plan.
 - Expedited continuing escalation of high-user potable water fees in single family zoning.
 - Develop innovative projects (rain water, challenge programs etc.)
- ★ **Use Existing Regulations to Reduce Homeowner Over-Watering.** *(from Nat. Env. & Landscape)*
 - **Require Installation of Water/Rain Sensors by All Commercial and Residential Users to Reduce Over-Watering.** *(from Nat. Env. & Landscape)*



SAP v2: WATER



WATER GOALS (SAP v2):

- **Goal 2: Reduce and Improve Wastewater Treatment.**
 - Sanitary Sewer – Inflow and Infiltration Mitigation.
 - Study Wastewater Plant – Solids Disposal System.
 - Bio Retention Swales in Urban Areas.
 - Improve Storm Inlets to Enhance Pretreatment.





BUILT ENVIRONMENT (old goals)



BUILT ENVIRONMENT GOALS (SAP v1):

- Sustainable buildings (governmental, commercial, residential)
- Create livable sustainable neighborhoods
- Utilize green material and resources
- Green spaces preservation & development
- Building education

BUILT ENVIRONMENT GOALS (Citizen Report):

- Recycling Programs for Businesses (5.1)*
- ★ Expedited Permitting for Green Buildings (5.2)
- Green Building Awards (5.3)**
- Construction and Demolition Waste Recycling (5.4)***
- Green Homes and Businesses Revolving Loan Fund (5.5)*



*Already in place.

**Moved to "Outreach and Education"

***Moved to "Waste".

Natural Environment and Landscape



Natural Env. & Landscape GOALS (SAP v1):

- N/A

Natural Env. & Landscape GOALS (Citizen Report):

- Use Existing Regulations to Reduce Homeowner Overwatering (4.1)*
- ★ Require Installation of Water/Rain Sensors by All Commercial and Residential Users to Reduce Overwatering (4.2)*
- Promote the Activity of Residential and Commercial Composting (4.3)**
- Provide the Opportunity for Recycling/Reuse of Plant Containers Numbered 5 or 6 (4.4)**
- Promote the Development of Vegetable Gardens (4.5)***

*Moved to "Water".

**Moved to "Waste"

***Moved to "Outreach and Education".



SAP v2: BUILT ENVIRONMENT



BUILT ENVIRONMENT GOALS (SAP v2):

- **Goal 1: Make 10% of all City Buildings Greener.**
 - Create Financial Incentives for Green Buildings.
 - Develop a city-wide facility retrofit program.
 - Develop goals for new energy efficient buildings.
 - Continue Green Homes and Businesses Revolving Loan Fund.
- **Goal 2: Make 10% of New Construction Green Buildings Every Year until 2015.**
 - Achieve LEED Silver for all new City buildings.
 - Create Financial Incentives for New Construction Green Buildings.



SAP v2: BUILT ENVIRONMENT



Natural Env./Green Spaces Added Here!

BUILT ENVIRONMENT GOALS

● **Goal 3: Preserve and Develop Green Spaces.**

- Develop Green Space Program.
- Incentivize Sustainable Landscaping for Commercial Property Owners.

● **GOAL 4: "PLANNING"**

- Develop Green Building Checklist.
- Expedited Permitting for Green Building
- Incorporate Energy Planning into Comprehensive Plan
- Planning to increase mixed use and density.
- Green Roofs.





WASTE (old goals)



WASTE GOALS (SAP v1):

GOAL 1: Reduce waste and increase recycling rates:

- ☀️ Make it easier to reduce, reuse or recycle
- ☀️ Improve regulation to increase recycling efforts
- ☀️ Revitalize recycling in government facilities
- ☀️ Increase education and awareness of waste reduction
- ☀️ Assess zero waste goal

WASTE GOALS (Citizen Report):

- ★ Expanded Beach Recycling (3.1)*
- ★ Event Recycling (3.2)*
- Commercial Recycling (3.3)*
- Ban/Reduction in Single Use of Plastic Bags (3.4)**
- Organic Waste/Recycling/Composting (3.5)

*Already in place.

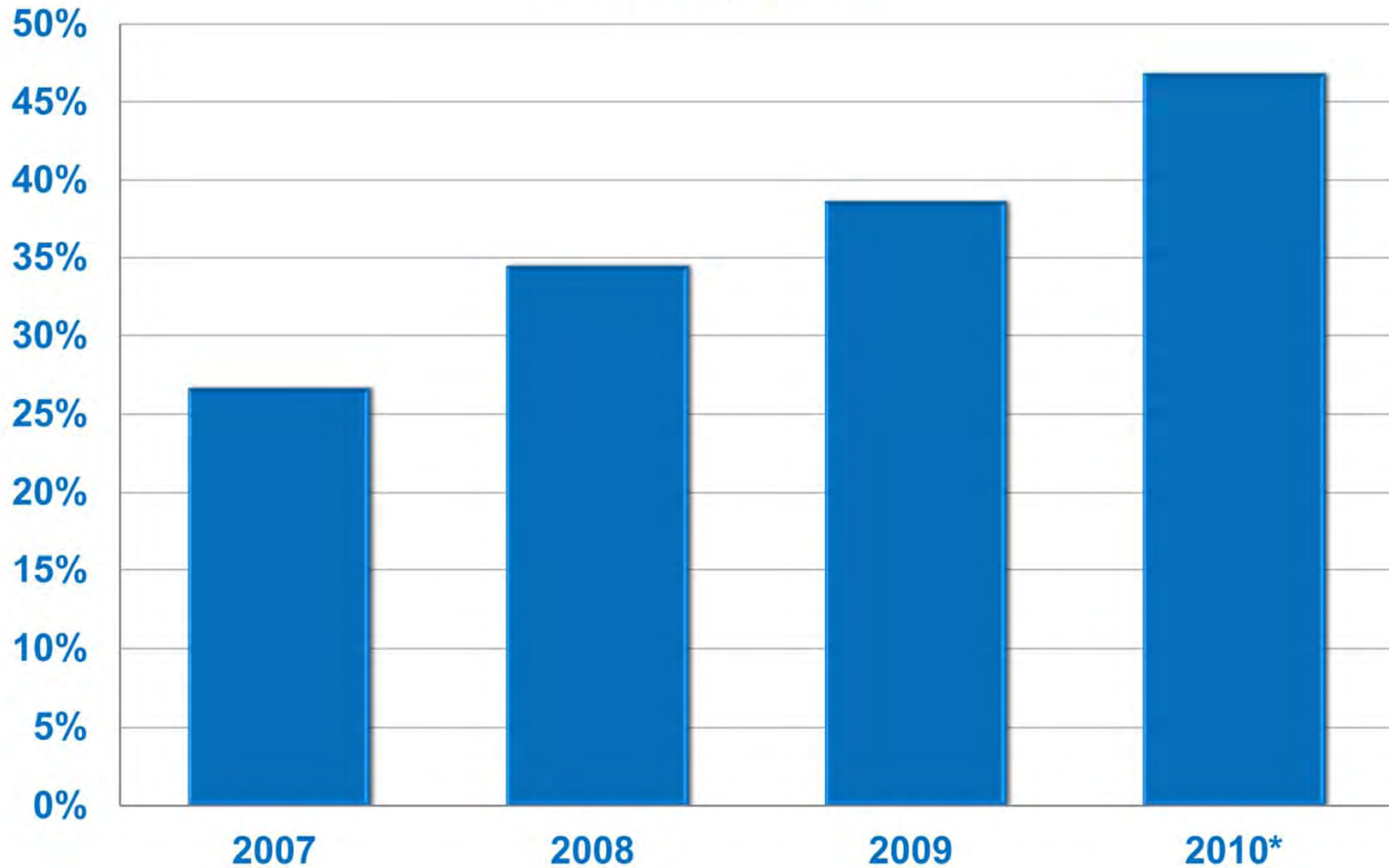
**Moved to Leadership.



WASTE (old goals)



Recycling Rates



WASTE



WASTE GOALS (SAP v2):

- Goal : Increase Recycling Rates to reach 50% by 2015.
 - Create champion of each City department to implement recycling efforts.
 - Explore Pay-As-You-Throw Program.
 - Reduce paper consumption for documents by supporting paperless technologies.
 - Incentivize deconstruction rather than demolition.
 - Support Organic Waste / Recycling / Composting.
 - **Provide the Opportunity for Recycling/Reuse of Plant Containers Numbered 5 or 6. (from Nat. Env./Landscape)**



EDUCATION



Sustainability Report

City of Fort Lauderdale
Citizens Sustainability Green Committee

*"We do not inherit the
earth from our ancestors,
we borrow it from our children."
-Native American Proverb*



October 2010

EDUCATION GOALS (Citizen Report):

- ★ Develop a Database of Green Initiatives (6.1)
- Public Awareness (6.2)
- Branding (6.3)

Quality Assurance and Quality Control



Sustainability Report

City of Fort Lauderdale
Citizens Sustainability Green Committee

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-Native American Proverb



October 2010

QA/QC GOALS (Citizen Report):

- ★ Assure All Sustainability Recommendations are Goal Directed.
- Assure All Sustainability Recommendations Are Evidence-Based and Cost-Effective
- Assure All Sustainability Recommendations Comply with the President's and OMB's Executive Orders.
- Assure Transparency and Interactive Collaboration Between City Government and the Public on the Development and Implementation of Sustainability.
- Adopt Integrated Environmental Management, Auditing, Evaluation, and Revision System.

TRANSPORTATION (old goals)



Sustainability Report

City of Fort Lauderdale
Citizens Sustainability Green Committee

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-Native American Proverb*



October 2010

TRANSPORTATION GOALS (Citizen Report):

- Increase Vehicle Occupancy Rates
- Change Land Use to Enable Alternatives to Driving
- Implement Bond Program to Improve Mobility Infrastructure for Biking, Walking and Transit Citywide
- Continue to Support Local TMA and DDA "Wave" Fixed Rail Projects
- Reduce Vehicle Engine Idling at Bascule Bridges and Railroad Crossings
- Aggressively Expand Replacement of City Fleet Vehicles with Hybrid and Alternative Fuel, Low CO2 Emitting Vehicles
- Lobby Efforts to Recommend Legislation to Significantly Reduce the Environmental Impact of Activities Through the Use of New Technologies and Alternative Fuels at the Port and Airport
- Fund Education Efforts to Inform Residents About Sustainable Transportation Initiatives and Local Options
- Encourage Carpooling by Expanding Availability of Parking for Carpools at City Facilities



BONUS SLIDES



Other Municipalities

Note on Regional Incorporation:

- SAP v1 referenced most ongoing projects
- Continuous monitoring of County activities
- The plan reflects all sectors that should be addressed

Quick Overview

- Broward: 7% below 1997 baseline
- Miami Dade: 80% from 2008 levels by 2050
- City of Miami: 20% reduction by 2010
- City of Hollywood: Reduce GHG Emissions From Vehicles by 2% every year.

TRANSPORTATION (old goals)



TRANSPORTATION GOALS (SAP v1):

GOAL: Create sustainable transportation:

- Ⓢ Reduce use of fossil fuels
- Ⓢ Encourage use of alternative fuels
- Ⓢ Reduce vehicle miles traveled
- Ⓢ Make public transportation safer, more secure, available & affordable
- Ⓢ Educate.



SAP v2: TRANSPORTATION



TRANSPORTATION GOALS (SAP v2):

- **Goal 1: Reduce Use of Fossil Fuels in Vehicles.**
 - Reduce Vehicle Engine Idling at Bascule Bridges and Railroad Crossings
 - Include fuel efficiency and fuel source in fleet replacement analysis
 - Determine fuel efficiency of fleet.
 - Provide business opportunities for companies involved in alternative fuel generation.
 - Research opportunities to use more alternative fuels (ethanol, biodiesel, biofuel, propane) in the City.
 - Aggressively expand replacement of City fleet vehicles with hybrid and alternative fuel, low CO2 emitting vehicles.
 - Provide a community wide infrastructure for the supply of alternative fuels.



SAP v2: TRANSPORTATION



TRANSPORTATION GOALS (SAP v2):

- **Goal 2: Reduce Vehicle Miles Traveled.**
 - Encourage Carpooling by Expanding Availability of Parking for Carpools at City Facilities
 - Reduce vehicle miles traveled within City operations (multi-purpose trips, flexible work patterns, teleworking ; compressed work weeks.)
 - Continue to Support Local TMA and DDA “Wave” Fixed Rail Projects
 - Implement Bond Program to Improve Mobility Infrastructure for Biking, Walking and Transit Citywide
 - Pursue and encourage public transit solutions



TRANSPORTATION



TRANSPORTATION GOALS (SAP v2):

- **Goal 3: Plan for Alternative Driving Opportunities.**
 - **Change Land Use to Enable Alternatives to Driving.**
 - **Integrate transportation projects that will decrease VMT, create denser neighborhoods and provide mobility hubs in vicinity to living space.**





ADAPTATION (old = new goals)



ADAPTATION GOAL:

Prepare the City for climate change impacts.

- Utilize existing planning strategies and include adaptation strategies into the City's plans
- Partner with agencies/educational institutions to increase preparedness
- Enhance communication about climate change adaptation



COMMUNICATION (old goals)



COMMUNICATION GOAL: Prepare the City for climate change impacts.

- Establish a communication framework:
- Create a clear City-wide mission
- Develop sustainability website
- Create a sustainability campaign
- Outreach and education
- Increase sustainability awareness within City



COMMUNICATION = OUTREACH AND EDUCATION



OUTREACH AND EDUCATION Objectives (SAP v2):

- Website
- Partnerships
- Awards and Challenge Programs
- Public Education



GREEN JOBS (old = new goals)



GREEN JOBS GOAL:

Enhance green job opportunities:

- ☀ Enhance green job opportunities:
- ☀ Educate the local workforce
- ☀ Pursue grant opportunities for green design and construction
- ☀ Create alliances with educational institutions



Leadership and Funding



Leadership and Funding GOALS (SAP v2):

- Mission/Vision
- Regulation
- Legislation
- Lead by Example



Funding Opportunities



FUNDING OPPORTUNITIES GOAL:

Enhance green job opportunities:

- Funding for governments: sustainable communities, renewable energy, energy efficiency and conservation
- Funding for residents: renewable energy tax credits, rebates, loans
- Funding for businesses: production tax credit, renewable energy tax credits, R&D.

