

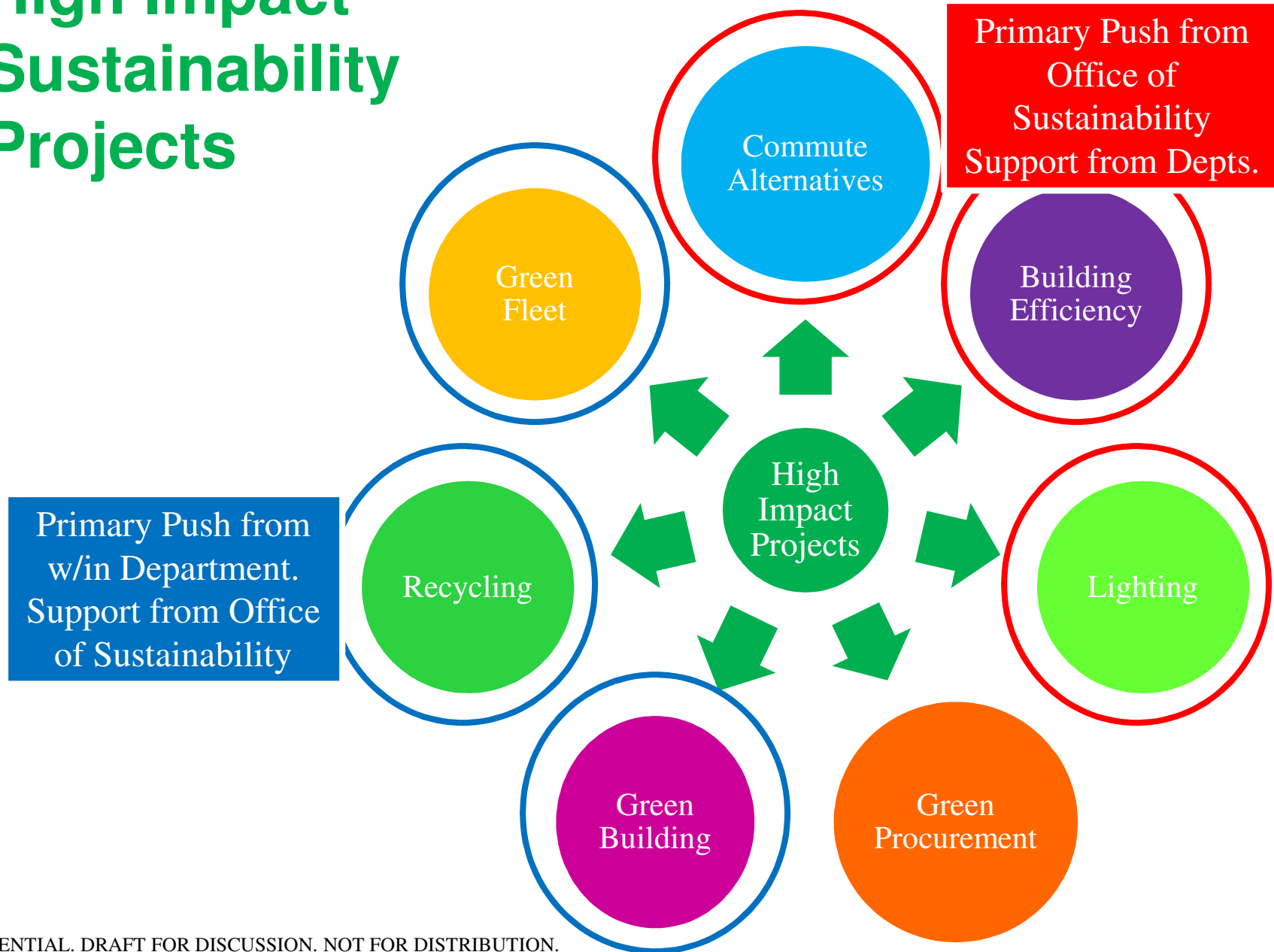
City of Atlanta
Office of Sustainability
Sustainability Update

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Director of Sustainability

2/3/09

High Impact Sustainability Projects



Projected Franklin Administration Success by end of 2009

- 10% drop in energy use in general fund facilities through low/no-cost conservation measures, resulting in avoided energy costs of \$300,000-\$500,000 per year
- 5% drop in water use in general fund facilities
- 2 renewable energy demonstration projects
- Major progress towards meeting Governor's Energy Challenge*
- 3% drop in fossil fuels used by municipal fleet yielding \$267,000 Savings
- 30% of employees using a commute alternative
- Recycling in municipal buildings over 50%
- **10% drop in GHG emissions from energy consumption in general fund facilities**

*Governor's Energy Challenge: Reduce energy consumption per square foot in government facilities 15 percent below FY2007 levels by 2020.

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Implementation of Efficiency Projects Top Priority

City Hall No Cost
Efficiency
Improvements

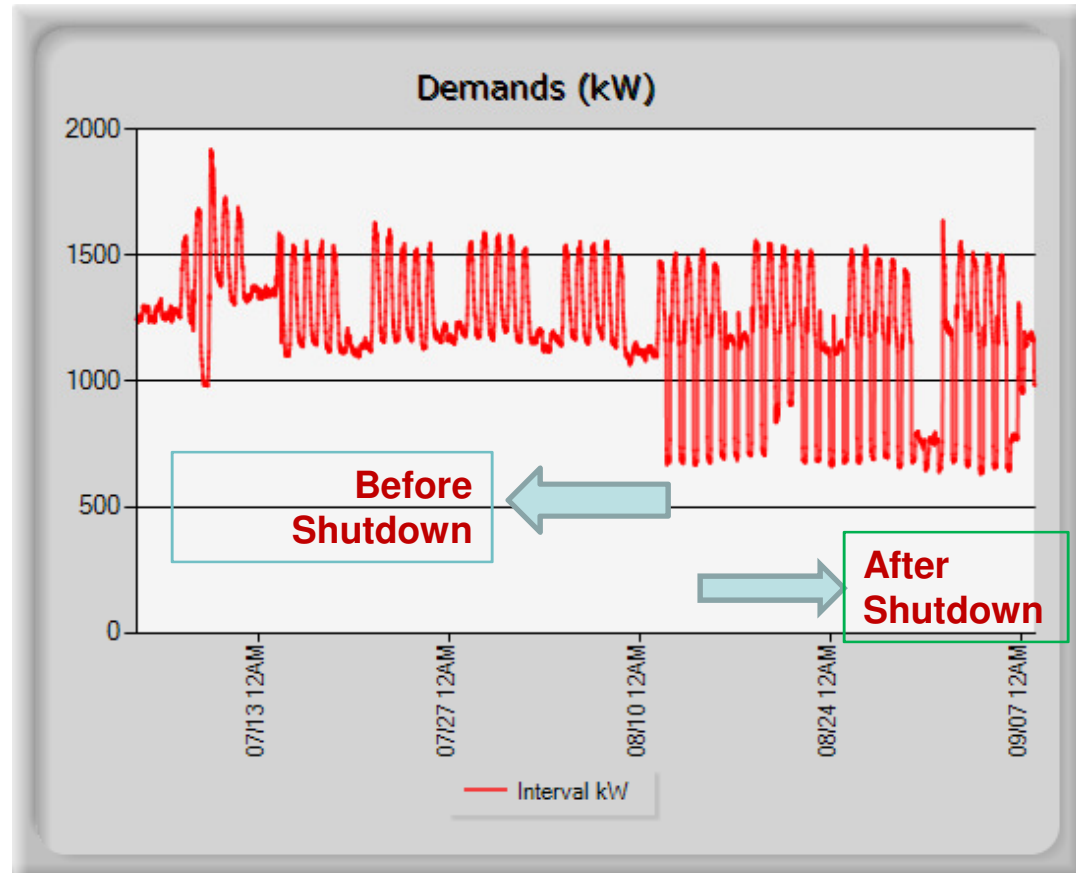
Expected Annual
Savings

Energy : 20-25%
Cost : \$134,000+

Results to date

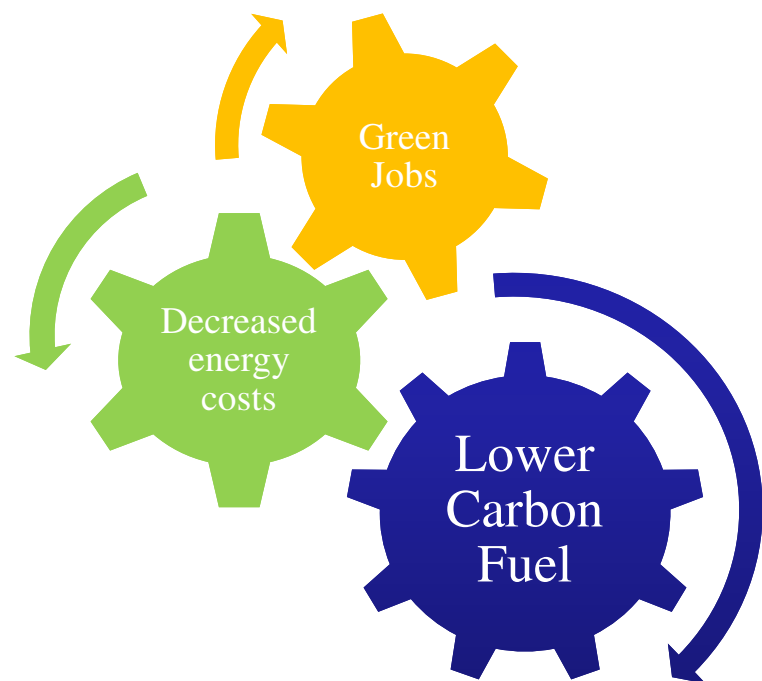
17%

Energy savings
since mid August



- The graph above shows the electricity demand for July 2008 (left) when HVAC systems operated 24 hours per day versus unoccupied-period shutdown beginning in mid-August (right).

Harnessing Renewable Energy Opportunities Make Economic Sense and Are Critical to Reduce GHG Emissions Beyond “Low Hanging Fruit”



Renewable Energy Projects Produce Significant Benefits and Will Drive Change Policy Beyond City Operations

Leading Renewable Energy Opportunities

- Solar Power (PV & Solar Thermal)
- Landfill gas from landfills in the city limits
- Co-generation for watershed industrial processes
- Co-firing of biomass

Recommended Next Steps

- Implement 2 Demonstration Projects
 1. Solar Thermal on MLK Natatorium
 2. Photovoltaic on Dunbar Rec. Center
- Work with GA Tech to study opportunities

Proposed Stimulus Package Energy Projects Would Jettison City Efforts

	Project Summary	Cost	Jobs	
Efficiency	Replace inefficient lighting with high-efficiency lighting, and install automatic lighting controls	\$4,117,854	29	
	Street lights, traffic communications, traffic signals, school flashers	\$57,600,000	576	
	Upgrade building envelopes, including installation of reflective or green roofing, insulation, and high-performance windows and doors	\$5,515,468	55	
	HVAC system efficiency upgrades, including replacement of inefficient equipment with high-performance systems, installation of automatic controls, and recommissioning of existing systems	\$12,673,636	100	
	Install low-flow plumbing fixtures	\$2,107,822	21	
Renewables	Install solar thermal and photovoltaic systems	\$52,390,000	524	
	Install waste-to-energy recovery systems (fuel cells, microturbines, and gasification systems) to convert waste energy sources (landfill gas, wastewater treatment system gas, yard waste, and waste grease) to renewable electricity for city government operations & biofuels for city fleet	\$13,000,000	130	
	Green Fleet- hybrid and electric vehicles, biodiesel and biodiesel fueling station, fuel cell pilot program	\$64,000,000	500	
		Total	\$211,404,780	1,935



Commute Alternatives

Reality: 78% of City Employees commute over 20 miles each way and drive alone.

Goal: Increase use of Commute Alternatives by 30%

Major Initiatives in Partnership with Clean Air Campaign

- Cash for Commuters & Commuter Reward: Increased education and outreach about these “traditional program”
- Teleworking: Aggressive teleworking policy and program rolling out city-wide
- Compressed Work Week: Under investigation by some departments.
- Zipcar Partnership



Campaign Logo
Final word changes to fit message

Audience

- City Employees during their time at work (Office and field staff)

Goals

- Reduce city utilities 3-5% through behavior change

Target Areas

- Water conservation
- Electricity use
- Natural gas use

Program Features

- Internal city campaign focused on all departments.
- created in partnership between Mayor's Office of Communication, Office of Sustainability, and Public Information Officers
- Leadership in word, spirit and action
- Major kick off events at all major city buildings in early October
- Targeted messages and activities through a variety of media and outreach strategies