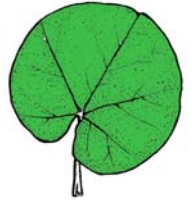


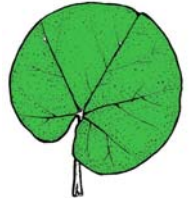
Water



- Water Conservation Fixtures
- Weather station and computerization of irrigation sites
- HVAC Upgrades
- Gasification



General

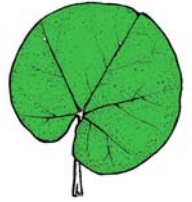


- Employee education and training
- Performance appraisals
- Intranet



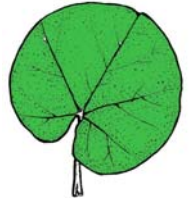
SECTOR AND MEASURE	PROJECT DESCRIPTION	COST SAVINGS	GHG REDUCTION MT/YR)
BUILDINGS			
Climate Control	City-wide policy of no less than 76F cooling, 68F heating	\$16,353.40	81
Office shutdown	Enforced override to send 30% more systems into sleep mode	\$12,577.95	60
Space consolidation	Closure of offsite storage	\$5,000.00	N/A
Energy efficiency measures	Occupancy sensors and energy efficient lighting	\$ 336.00	1.6
HVAC retrofit	Upgrades at three facilities on Riverside Drive (water and electric)	\$156,971.00	52
COMMUTE			
Commuter services	One commute pp/week <i>individual savings</i>	\$72,500	305.5
Four-day weeks	Hypothetical City-wide four day weeks <i>estimated</i>	\$36,076.62	482.5
STREETLIGHTING			
12th Ave. S. Pilot project	Replacement of 12 streetlights with CosmoPolis bulbs	\$740.00	5
5th Ave. S. re-design	CosmoPolis bulb replacement (125 bulbs) on 5th Ave S.	\$3,492.50	16
FLEET			
Fleet reductions	Retirement of 23 older vehicles	<i>estimated 5% reduction in fuel</i> \$26,766.90	130
No-idling policy	Engine shutdown if stationary for more than 3minutes		
Driver education	Promoting fuel conscious driving habits and vehicle maintenance		
WASTE			
Office Waste Management	Recycling and waste reductions (5% total government waste reduction)	\$12,226.00	30
Construction materials recycling	Dumpsters at Public Works for construction materials recycling	\$200.00	minimal
Water bottles phase-out	Ending contracts for single serving plastic City water bottles	\$1,500.00	not known
Printing	Duplexing, paper and ink reductions, electronic billing... .. <i>min:</i>	\$750.00	1.3
WATER			
Water conservation fixtures	Low flow toilets at Community Services, Fleischmann Park and Naples Pier	to be determined	to be determined
Irrigation control	Weather station and computer control of remote irrigation sites		
HVAC retrofit	Upgrades at facilities on Riverside Drive (see buildings for water savings)		
Gasification	Proposed regional biosolid treatment facility		
GENERAL			
Employee training	Including energy efficiency content in standard training sessions	\$10,129.20	51
Performance appraisals	Assessment of individual employees efforts at reducing resource use		
On-going education	Using the intranet to provide information on energy efficiency measures		
TOTALS		\$355,619.57	1216

Next Steps



- Reduction target
- Energy savings policy
- Implementation
- Assessing results
- Community measures

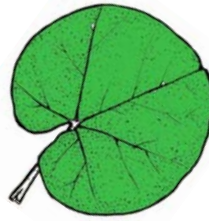
Energy Savings Task Force



- Dr. Mike Bauer, Natural Resources Manager
- Cloe Waterfield, Twentyfifty, LLC
- Bill Moss, City Manager
- Roger Reinke, Assistant City Manager
- Bob Middleton, Utilities Director
- Denise Perez, Human Resources Director
- Dave Lykins, Community Services Director
- Mike Leslie, Assistant Community Services Director
- Ann Marie Ricardi, Finance Director
- Robin Singer, Planning Director
- Tom Weschler, Chief of Police and Fire
- Ron Wallace, Streets & Stormwater Director
- Steve Weeks, Technology Services Director
- Chuck Cunha, Facilities Maintenance Supt.
- Paul Bollenback, Building Director

City of Naples
The Green Jewel of Southwest Florida

**Energy
Savings
Action
Plan**



Prepared by Twentyfifty LLC., May, 2009

Executive Summary

In November 2008, The City of Naples convened an Energy Savings Task Force to find ways to reduce energy use, costs and greenhouse gas emissions from governmental operations. The Task Force, comprised of City Managers and representatives of all departments, met over a six month period to identify practical, cost effective and logistically feasible ways to reduce City operating costs related to resource use. This report presents the findings and conclusions of the work effort and is presented as part one of an energy action plan for the City of Naples. Part two will expand the focus to the entire city.

The City recognizes both the imperative to reduce utility costs and the benefits of applying sustainable operation practices, to fully realize the vision set forth for Naples as the green jewel of Southwest Florida. Reducing energy use not only cuts costs (potentially saving jobs) but also reduces emissions of fuel derived greenhouse gases (GHG). As a signatory to the non-binding resolution set forth in the U.S Mayors Climate Protection Agreement, Naples is living up to that pledge by addressing its impact on global environmental change.

With funding assistance from the Conservancy of Southwest Florida and Collier County Audubon Society, the City carried out a greenhouse gas inventory in 2008, assessing energy use and GHG emissions for the calendar year 2006. Methodology follows that prescribed by ICLEI (the International Council for Local Environmental Initiatives), and as such, not only gives credibility to the protocol and calculations entailed, but is comparable with over 550 fellow ICLEI members across the county. The inventory serves as a benchmark of energy use and quantified emissions from both the wider community (within City limits) and those from facilities and operations under the City's management. During 2006, Naples as a whole produced 757,323 metric tons of greenhouse gases, while government operations accounted for 23,277 metric tons of greenhouse gases, 3% of the total community amount.

The Energy Savings Task Force considered both behavioral and structural modifications to reduce energy use. Work began by examining actions that could be taken on an individual employee basis and concluded with assessment of potential City-wide, inter-departmental and/or regional projects. Ideas were presented and discussed in a collaborative format and on agreement; consultants assessed the potential cost and GHG savings as well as actions needed to enact the change.

Table 1 provides a summary of action items and potential savings.

SECTOR AND MEASURE	PROJECT DESCRIPTION	POTENTIAL ANNUAL COST SAVINGS	POTENTIAL GHG REDUCTION (MT/YR)
BUILDINGS			
Climate Control	City-wide policy of no less than 76F cooling, 68F heating	\$16,353.40	81
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GENERAL			
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Performance appraisals	Including assessment of individual employees efforts at reducing resource use		
On-going education	Using the intranet to provide information on energy efficiency measures		
TOTALS		\$355,619.57	1216

Table 1: At a glance Summary of Measures, Costs and GHG Savings

A list of action items has been prepared to clarify the next steps in terms of making the estimates a reality:

City of Naples Action Items:

1. Provide relevant policy guidance on climate control
2. Provide relevant policy guidance on office electronics
3. Close off-site storage locations
4. Create a Records Center at City Hall
5. Explore office consolidation
6. Continue and expand the use of motion sensors and energy efficient lighting throughout City facilities
7. Continue to work with Commuter Services to promote carpooling opportunities
8. Explore the feasibility of a 4-day week
9. Provide relevant policy guidance on monitoring fuel conservation
10. Provide relevant policy guidance on office waste management with targets
11. Document installation of water conservation fixtures
12. Document HVAC upgrades
13. Continue to work with Collier County on regional waste solutions
14. Include energy efficiency saving in mandatory staff training

The City may choose to establish a reduction target for GHG emissions, as outlined in the ICLEI 5-step protocol. A proposed initial goal for Naples would be a 1% reduction in GHG emissions per year. If all action items in this report are fully implemented, at 1039 metric tons, this would amount to 4.4% of the City's total emissions for 2006.

The next steps will be to expand the work into the community sector and identify ways residents and businesses can also cut their energy use and reduce emissions. By addressing internal operations through the Task Force efforts the City of Naples has not only demonstrated regional leadership but has also developed an effective model for continued economic and environmental stability.