

Quick Fact box; with a variety of temporarily posted, non work related trivia and general knowledge.

To expand and promote energy savings efforts both at work and at home, the 'current news' section of the City's intranet page will be used to provide a weekly series of green, energy saving and low carbon ideas. Fifty two separate suggestions (one per week) have been developed (a summary is provided in Appendix II) and wherever possible, greenhouse gas reductions that could be realized, are estimated. Significant energy reductions and move towards a more sustainable lifestyle could be achieved for employees that enact all the suggestions. The information may be a reminder or brand new knowledge. Efforts have been made to ensure each suggestion is energy focused, not a general environmental or eco-living tip. New tips will be posted every Monday and remain there all week. Users will be able to view the topic for the entire week and scroll backwards to view preceding tips.

We conservatively estimate that following staff training, employees should be able to save 2% of their daily electricity use at work. Using FPL summaries of facility electric use and costs for 2008 (4,847,593 kWh, \$506,460.36). Gives:

Estimated savings: \$10,129.20 and 51 metric tons CO₂e

Action items: include energy efficiency saving in mandatory staff training

III. Moving Forward

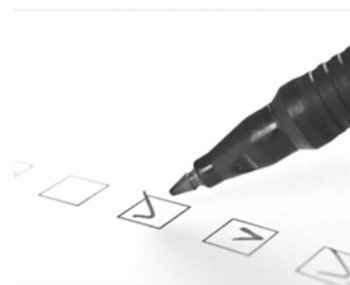
a) Reduction Targets

City Council, Managers and staff may consider the adoption of a target reduction for GHG emissions. Most municipalities establish a target of a 10-15% reduction within a timeframe of 10-20 years post initial inventory. These goals typically encompass community measures which the City of Naples has yet to address. Significant savings are constrained by the City's proportionally small contribution, at only 3% of the total community emissions. Reduction targets for the wider community also take into account increases in emissions based on expected population growth, and typically therefore are more challenging than a simple reduction from baseline. In other words if you set a target of 15% but growth and expansion entailed an additional 5% worth of emissions, your real reduction target would need to be 20%. As the City is at or close to build out this is not considered limiting.

A proposed goal for City Government operations would be a 1% reduction in GHG emissions per year, translating to significant savings in fuel use and costs. It is at the City Manager's and Council's discretion as to whether a binding goal is established. Advantages include a clear goal and framework to encourage and give structure and meaning to employee's individual efforts as well as solidifying the City's demonstrated efforts in energy savings. Table 1 (page 5) estimates total GHG savings, if all action items in this report are fully implemented, at 1216 metric tons. This is 5.2% of the City's 2006 total emissions.

b) Summary of Action Items

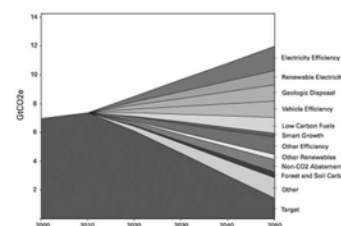
1. Provide relevant policy guidance on climate control
2. Provide relevant policy guidance on office electronics.
3. Close off-site storage locations
4. Create Records Center at City Hall
5. Explore office consolidation
6. Continue and expand the use of motion sensors throughout City facilities.
7. Continue 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



Checking the success of energy savings is straightforward as numbers and bills can be compared.



Much of the raw data, for assessing progress and for a re-inventory, is in the form of utility summaries.



Over time, with small reductions in many areas, we will see an overall drop in fuel use and GHG emissions - the wedge approach to climate stabilization.



All steps we take to reduce fuel use, contribute to an energy independent America.

c) Assessing the Results

The audit approach, relying on quantitative data on fuel and utility use, has real value in that successes and setbacks can be assessed in an on-going manner. Simple, objective, success criteria have been established for every sector:

Buildings

Provide documentation of reduced electricity bills for City facilities.

Commute

Participation by City employees in the Commuter Service program.

Street lighting

Provide documentation of reduced electricity bills for City street lighting accounts

Fleet

Demonstrate fuel use reductions.

Waste

Survey offices to check that all staff have access to a recycling receptacle, demonstrate use (through material sales) of commercial recycling capability.

Water

Document successful installation of low-flow fixtures and irrigation control technology. Show staff participation, and support, of new regional options to dispose of sewage sludge.

General

Successful posting of energy savings tips on the City intranet, document staff involvement and ideas through performance appraisals.

d) Re-inventory

ICLEI recommend a full re-inventory of GHG emissions every 3-5 years. With our baseline year established as 2006, re-assessment should take place in 2010 or 2011. For the government sector only, required raw data would include FPL summaries, fuel summaries, estimation of City generated waste and a survey of commuting habits. While federal legislation on carbon emissions is still pending, the EPA have recently announced rule making that all entities emitting over 25,000 metric tons of CO₂e annually, be required to report emissions. The EPA also announced in April that CO₂ is now considered a pollutant, federal regulation is pending³⁴. Rules and guidelines have yet to be established for governments, note that Governor Crist established a target of a 40% reduction in emissions from state of Florida facilities by 2025³⁵. The City of Naples emitted 23,277 metric tons in 2006⁵. By taking early action to account for and reduce GHG emissions the City demonstrates its commitment to the future and could benefit from these efforts with future state and federal grant or rule making opportunities.

e) Funding Opportunities

This report will be referenced in grant applications for energy related federal stimulus funding. While the City of Naples is not eligible (based on population size) for the allocated portion of the 2009 Energy Efficiency and Conservation Block Grants (Department of Energy)³⁶, the City will be making direct application to the state of Florida³⁷. Application details and requirements are still forthcoming at the time of writing, but, for block grant recipients (Collier County is eligible for just over \$3 million), entities must provide an energy conservation strategy within 4 months of receiving funds. This report, in conjunction with the GHG inventory, can be submitted as the City's strategy, clearly documenting sources and amounts of GHG emissions and how government intends to reduce them.

f) Community Measures

The City of Naples is demonstrably leading the community in efforts to reduce energy use, and hence playing its part in addressing global environmental change. Inspiring, leading and paving the way for action in the wider community of Naples, is the next step. This is a more challenging task but the rewards - more money in the pockets of residents hence our local economies, and reduced carbon emissions - are great. In practical terms any efforts at reducing energy use in the community needs full buy-in and participation from all affected sectors. Some ideas for how the City could expand this effort:

- 1) Establish an Energy committee, mirroring the Energy Savings Task Force, with representatives of government, local residents, schools, the business community and other interest groups. Involve other municipalities and agencies as appropriate.
- 2) Set a clear agenda for the committee's work.
- 3) Benefit from the ideas and collaboration provided by ICLEI and its members. Examples of GHG reduction projects in every sector can be found, from green roofs to green business programs to bike rental fleets. The committee's task would be to analyze and consider the applicability of specific projects to our City, and/or develop new ideas.
- 4) Present the results as a community-wide plan at the end of a prescribed time-frame.



The City of Naples is paving the way for a more sustainable community.



Full participation will be needed to develop a meaningful and practical community energy savings plan



The City may embrace more renewable energy (like this solar roof-topped town in Germany) or other measures.



All actions are very much in accord with the City's vision as the green jewel of southwest Florida.

IV. Concluding Comments

This Energy Savings Action Plan is a step forward in energy conservation efforts for the City of Naples. By focusing on City facilities and what is reasonably achievable with minimal, low or previously budgeted funds, it consolidates a number of disparate areas into an overarching plan.

A primary focus of these initial low cost efforts is to change energy management behavior, hence the focus on education, training and staff recognition. The plan illustrates the potential savings from such actions as adjusting temperature settings, or fully powering down electronic equipment or choosing to car pool. Energy reductions do not have to depend on expensive and involved infrastructure modifications. That said, those small, incremental but cumulatively significant changes only work in cooperation with all team members. A key finding, as the work of the Energy Savings Task Force progressed, was that good ideas and intent was already out there. What is needed is the policy and management guidance to make those ideas a reality.

New projects, ideas and funding sources are arising all the time. This plan does not address recent presentations to Council for the application of renewable and alternative energy sources (wind or solar). As those projects proceed (and in the interests of withholding Climate Protection commitments) they should be assessed in terms of cost savings and GHG reductions.

Local governments are facing another tough budget year and looking at many ways to cut costs and save money. We hope that before more jobs are lost or projects put on hold, that these efforts might help. Enacting elements of this plan lends worthy ownership to the green jewel moniker the City has adopted.

References and Literature Cited

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- 2 IPCC, 2007, Bindoff, N.L., J. Willebrand, V. Artale, A. Cazenave, J. Gregory, S. Gulev, K. Hanawa, C. Le Quéré, S. Levitus, Y. Nojiri, C.K. Shum, L.D., Talley and A. Unnikrishnan, 2007: Observations: Oceanic Climate Change and Sea Level. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. *Available at* <http://www.ipcc.ch/ipccreports/assessments-reports.htm>
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<http://www.usmayors.org/climateprotection/agreement.htm>
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35 Executive Order 07-127. July 13, 2007. Florida Governor Crist issued EO 07-127 to establish statewide GHG emission reduction targets: reaching 2000 levels by 2017, 1990 levels by 2025, and 80 % below 1990 levels by 2050. Details are available from:
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http://www.eecbg.energy.gov/block_grants

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Appendix II: Energy Savings Tips for Staff

1. Home Lighting Replacement
2. Water heating
3. AC control
4. Clothes drying
5. Dishwasher
6. Plastic shopping bags
7. Food choices
8. Plastic bottles
9. Disposable containers
10. Tire pressure
11. Driving style
12. Car wash and weight
13. Shop locally
14. Recycle
15. carpool
16. Clothes washing
17. Kitchen water savings
18. Natural light
19. Energy vampires
20. Electronic switch-off
21. Savings paper
22. Plant a tree
23. Water leakages
24. Bathroom water savings
25. AC maintenance
26. Smart meter
27. Fridge operation and maintenance
28. Kitchen electric savings 1
29. Junk mail and newspaper subscriptions
30. Exterior lighting
31. On-line utility management/banking
32. Water conservation fixtures – faucets
33. Water conservation fixtures – toilets
34. Hazardous and electronic recycling
35. Give up vacuum cleaner (for a week)
36. Start a compost box
37. Grow your own food
38. Yard sale or freecycle.org
39. Join the library
40. Use a green drycleaners
41. Barbecue
42. Switch to recycled paper goods
43. Halloween tips
44. Thanksgiving tips
45. Christmas tips 1
46. Christmas tips 2
47. Christmas tips 3
48. Christmas tips 4
49. Kitchen electric savings 2
50. Take a day off
51. Vacation travel
52. Checklist and analyze your carbon footprint.

Appendix III: Energy Related Memoranda



City Manager's Administrative Memo

Subject: 3-Minute Idle Rule Policy		
Index Number AM- 19	Date of Issue 10-1-08	Revised Date

SUMMARY STATEMENT

The City of Naples is instituting a new Vehicle 3-Minute Idle Management Policy for all City employees. Unnecessary idling wastes fuel, pollutes, shortens engine life and increases maintenance costs.

SCOPE

All of the City of Naples fleet vehicles and equipment.

DEFINITION

“Idle” means the operation of the engine of a vehicle while the vehicle is not in motion.

PURPOSE

Currently, the City's vehicle fleet includes about 300 vehicles including medium and heavy-duty diesel powered vehicles, light and medium duty gasoline powered trucks, SUVs and cars, to carry out municipal operations. The exhaust from the combustion of fossil fuels, such as from gasoline or diesel powered vehicles, contains a variety of hazardous gases and particulate contaminants that may aggravate respiratory ailments. Additionally, unnecessary idling of the City's fleet wastes fuel and drives up operational cost.

ACTION

It is in the best interest of the City of Naples to enforce a 3-Minute Vehicle Idle Management Policy, to improve air Quality while realizing significant savings in Fuel and Operational costs.

Effective immediately, unless exempted in the following section, no City vehicle or piece of equipment is to idle for more than three (3) minutes in a non-emergency situation. The

operator of the vehicle/equipment is to turn off the unit and the keys are to be removed from the ignition.

EXEMPTIONS

Idling is permitted when:

1. A vehicle/equipment is required to remain motionless due to an emergency, traffic or mechanical difficulty over which the operator of the vehicle has no control.
2. Emergency vehicles are at scenes where lights, PTO's, and/or other accessories are needed to accomplish their mission.
3. Police vehicles have a K9, passenger, or detainee on board; or when working traffic enforcement details, or when the officer is completing reports in the vehicle.
4. The use of the vehicle/equipment's auxiliary equipment (PTO, generator, pumps, computers, etc.) is needed.
5. Vehicle/Equipment is being repaired.

INCLUSION EXAMPLES

Idling is not permitted when:

1. The purpose is to keep the cab cool or heated.
2. The vehicle/equipment is unoccupied.
3. Loading or unloading.
4. Fueling vehicle/equipment.

OPERATIONAL GUIDELINES

Operators and supervisors of vehicle/equipment will use sound judgment in the application of this policy as it applies to idling of units at emergency scenes and job sites. When multiple vehicles are on scene; those units acting in a support role and not directly involved in blocking traffic or running ancillary equipment must be turned off and the keys removed from the ignition.

Each vehicle/equipment operator will be responsible for the idling operation of their unit and will have the unit keys in their possession to ensure that crew members do not arbitrarily violate the policy without the operator's knowledge.

RESPONSIBILITY

Supervisors in each department/division will be responsible for the adherence and enforcement of the idling policy.

Approved By:



A. William Moss
City Manager

10/1/08

Date



Memo

Office of the City Manager

TO: All City Employees
FROM: A. William Moss, City Manager *7*
DATE: January 29, 2009
SUBJECT: Office Equipment and Energy Conservation

Ladies and Gentlemen:

Department Directors have been participating in a Division of Natural Resources initiative, as suggested by City Council, to devise means to advance one of the City's goals—Make Naples the green jewel of Southwest Florida. The work group is referred to as the Energy Task Force. Its mission is to consider ways to conserve energy.

In a recent meeting, we discussed the use of office equipment and ways to reduce energy demand. Also, in response to the City Manager's request of employees to offer cost savings suggestions, an employee reminded us that simply turning off office equipment at night and on weekends could save money.

Please take the time to read the below policies regarding office equipment.

Office Equipment and Energy Savings

Power consumption seems to be on everyone's minds these days. As the cost of energy rises, there's a natural desire to want to save money by minimizing energy costs. There are approximately 350 desktop and notebook computers in use by City employees. Additionally, we have over 80 LaserJet printers and numerous personal Inkjet type printers. While most PCs, monitors and printers are capable of "sleeping" or going into a power savings mode after a set period of time, it is more desirable to completely shut down the PC, monitor and even printers when they won't be used for hours. A typical 35-watt LCD computer monitor will use about 2.5 watts per hour while idle. Of course, if you have 350 displays, all drawing 2.5 watts per hour, that's around 14,000 watts per night! Add to that the cost of running a PC, even with power management, and one may start to see the potential for savings.

Starting today, we ask all PC users to completely shut down their systems, monitors, printers and copiers when leaving for the day. Users may also shut down the UPS (battery backup) using the power switch on its front panel. Technology Services will also be sending out scripts to selectively force systems that are left on to go into the sleep or power savings mode if they happen to be left on. This can all be accomplished by department or division so systems that are required to be on will not be affected. Supervisors, please let Technology Services know if there are systems that you need to be left on.

Ethics above all else... Service to others before self... Quality in all that we do.

Office and Building Lighting

Please turn off office lights when leaving for any period of time. This may seem like a small thing, but if everyone pitches in, it mounts up. Also turn out area lighting when leaving for the day. Remember to turn off all task lighting over desks and work stations.

Office Waste

There is a lot of waste in today's office environment. How many times do we walk by our printer and find dozens of unclaimed pages that have been around for days? How many times do we print out unnecessary pages? How often are print-outs brought to meetings when every one already printed a copy? How many times have we not used the "print preview" button when printing out a webpage to print only the vital pages?

While we live in a digital world, it is not paperless. Help reduce the City's carbon footprint and organize an office waste reduction campaign. Not only is it good for the environment, you can help drive cost savings in your department. (It's win-win!)

Office Waste Reduction Tip #1

Duplex Printing - Change your computer's default settings to duplex print. Duplex printing is another term for Double-Sided Printing. Double-sided printing can reduce your office paper waste up to 50%. By making this the default setting, you save every time you print without thinking about it. This can translate into major cost savings if many people start to print on both sides. Changing your computer's settings to duplex print should not cause paper jams. If you print a lot of Excel spreadsheets and you duplex print, you may need to change the settings to flip on the long edge.

Note that not all City printers are duplex capable. For ones that are, follow this procedure to enable duplexing as a default:

Print on Both Sides (Duplex) as Default Setting for all Print Jobs

To set Print on Both Sides (duplex) as the default setting for all print jobs (even single page jobs) use the following steps:

1. Click **Start, Printers** or **Printers and Faxes** from the Microsoft Windows desktop.
2. Right-click the HP printer you normally print to and select **Printing Preferences**.
3. Click the **Finishing** tab.
4. Select **Print on Both Sides** under the Document Options section.
5. Click **OK** to save the setting and close the Printing Preferences window.
6. Close the Printers or Printers and Faxes folder.

Office Waste Reduction Tip #2

Recycle More – We all should make sure our office or cubicle is equipped with a blue recycle basket, and we should use it to recycle paper products. If one is not available, please contact Facilities Maintenance. Each building should have the larger 95 gallon recycling carts. If custodial services do not empty the blue recycle basket, please empty the paper products into

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the larger recycling carts. Also, please recycle aluminum and plastic materials by placing them in the appropriate recycling cart.

While not related to office equipment, we should all remember the recently enacted “no idle” policy when using city vehicles. In non-emergency situations, avoid aggressive starts. Drive without excessive throttling, which then results in hard braking at the next stop. Keep tires inflated to the proper pressure. If you do not know the required P.S.I. for the vehicle, look at the metal plate on the driver side door frame.

Your assistance and cooperation are appreciated.

For more information:

The point of contact at the City of Naples is Natural Resources Division Director, Mike Bauer, who may be reached at;



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http://cs.naplesgov.com/Natural_Resources/

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