

GO GREEN SAVE GREEN 2010 ANNUAL REPORT

Go Green



Save Green
VILLAGE OF HOWARD

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GO GREEN, SAVE GREEN ANNUAL REPORT 2010



Mission Statement:

- Identify ways to provide internal and external cost savings to the Village of Howard.
- Provide a sustainable benefit to our economy, ecology and community.

Established June 2008

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Taskforce Highlights



ESTIMATED ACCRUED SAVINGS (2008-2010): \$24,900*

ESTIMATED 2011 SAVINGS: \$43,000*

ESTIMATED CO2 REDUCTIONS: 407,519 lbs.*

How did we do it?!

- 1) A free Energy Audit provided recommendations on motion detecting lighting and adjustments to heating/cooling settings saving the Village nearly \$25,000 in 2009!
- 2) Employees are encouraged to think green by participating in the Village's Employee Incentive Program.
- 3) Three LED streetlights were purchased in 2009 to serve as a pilot program.
- 4) Two flex fuel vehicles are currently monitoring the differences (cost and performance) of using E-85 ethanol fuel instead of Unleaded fuel.
- 5) The Village's computer policy saves 112,000 lbs. of CO2 annually. LCD monitors use less energy and computers are turned off at 7pm daily. Village Trustees use laptops to reduce paper waste.

*= Estimates based on calculated/estimated savings and reductions.

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Greenhouse Gases- What are they?



The Village of Howard has been very involved in tracking its greenhouse gas emissions. There are six greenhouse gases- the most common being Carbon Dioxide. Greenhouse gases capture heat and radiation in the Earth's atmosphere, thereby contributing to global warming.

Each GGSG initiative is tracked for its impact on the environment. One such measure is the amount of carbon dioxide reduced. What does 1 ton of CO₂ look like?

To the right, a 1 ton cube has been created. It measures 27'x27'x27'. In this report, CO₂ reductions are measured in pounds.

1 Ton= 2,202 pounds

Since its creation, the Go Green Save Green Taskforce has helped remove **185 tons** of CO₂ from the atmosphere.



Photo Source: http://www.energyrace.com/commentary/what_does_a_ton_of_co2_look_like/

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Project Tracking Sheet



GGSG Initiative	Initiative Description	Implementation Year	Eco-Benefit	*Annual CO ₂ Reduction	Initial Cost	Net Fiscal Impact
Village Green Golf Course Lighting Upgrade	Motion detecting lighting was installed at Club House and Garage. Exterior lights were removed from garage.	2010	Reduces electricity consumption.	TBD	TBD	TBD
TV Usage	Fire Dept grant monies purchased a TV for training. The TV is being used for all ELT, LMT and Agenda Prep meetings.	2010	Reduces approximately 100 pages per week.	5200 lbs.	No cost.	TBD
Community Gardens	The taskforce recommended to the Village Board to create community gardens with the Village for public use.	2010	Offers sustainable food source for residents without access to yard/garden space.	TBD	Staff time for tilling/staking plots and marketing of gardens.	TBD
Computer Policy	All computers automatically shut down at 7pm. Monitors were replaced with more efficient LCD monitors.	2009	Reduced electricity usage, longer life of the units.	TBD	TBD	TBD

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GGSG Initiative	Initiative Description	Implementation Year	Eco-Benefit	*Annual CO ₂ Reduction	Initial Cost	Net Fiscal Impact
Carbon Footprint Calculation	Using ICLEI's CACP software, a greenhouse gas emissions inventory was conducted for govt operations and the community as a whole.	2009 Govt Operations 2010 Community	Allows the Village to better track its impact on the environment and provides a baseline for goal setting.	N/A	\$600 to become a member of ICLEI- Local Governments for Sustainability	N/A
Energy Action Plan	An Energy Action Plan was created to set targets based on the carbon footprint.	2009	Provides quantifiable targets to help reduce the organization's carbon emissions.	N/A	No cost.	N/A
25x25 Resolution	Governor Doyle asked municipalities to sign onto his 25x25 initiative. The Village passed Resolution 2009-29 signing onto the initiative.	2009	The initiative seeks to transfer 25% of its energy usage to renewable sources by 2025.	TBD	No cost.	TBD
Grant Writing	Applied for Energy Efficiency and Conservation Block Grant (EECBG) and Coca Cola Recycling Grant	2010 2009	Help find funding for eco-beneficial projects.	TBD	No cost.	TBD

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Vegetable Waste Composting	Invited the Howard-Suamico School District to allow food waste (non dairy and meat products) in the Village compost site.	2009	If the school district participates, organic waste would be deferred from the landfill.	TBD	No cost.	TBD.
LED Streetlights	Purchased three LED streetlights to be installed on Howard Blvd as one-year pilot program.	2009 2010 Installation	The pilot program will measure any savings from the LED streetlights.	20,000 lbs.*	\$17,100 materials \$9,750 installation	Projected annual savings of \$113.00*
LED Solar-Powered Speed Signs	Approved the purchase of two LED solar-powered speed signs.	2009 2010 purchase	The signs won't need to be transported to and from police garage for charging.	N/A	No cost.	N/A
Green Recognition Program	Howard businesses are recognized for green efforts.	2010	Encourages Howard businesses and residents to share their green efforts to help influence others to be green.	N/A	No cost.	N/A

*Estimates were calculated using ICLEI's CAPP and/or CACP software.

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Akzo Nobel Sports Complex Lighting Upgrade	Installed high-efficiency lights at the Akzo Nobel Sports Complex	2008	Reduced electrical consumption to operate 16 large light fixtures.	50,000 lbs.	No additional costs versus purchasing standard lights.	Will realize \$2,000 in electrical savings in 1 st year.
Laptop Program	Issued 4 laptop computers to Village Trustees to reduce paper usage	2008	Reduced paper usage by approximately 60,000 sheets of paper and saved 7 mature trees annually.	60,000 lbs.	\$4,500 for cost of 4 laptop computers; \$600 to run electricity to Village Board dais.	\$2,400 savings in paper costs (does not include staff time or copy machine maintenance). Will realize savings between year 2-3.
Public Works Lighting Upgrade	High-efficiency lights installed at public works, including motion detectors	2008	Reduced electrical consumption	1,800 lbs.	\$3,480	Bulbs will pay for themselves in 1.5 years. Annual savings of \$2,610.00.
Maywood Garage Improvements	Insulated & weatherproofed Maywood water utility building	2008	Projected 30% reduction in utility costs.	10,000 lbs.	\$1,984.60	Projected annual savings of \$1,569.03.

*Annual CO₂ Reduction is an estimate based on online CO₂ calculators.

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Heating/Cooling Adjustments	Regulated Village Hall, park shelter & Public Works' heating and cooling settings from Focus on Energy recommendations.		Reduced heating & cooling costs by 5%.	3,100 lbs. at each building.	No additional costs.	Projected annual heating/cooling cost savings of \$2,631.23 at Village Hall and \$2,033.18 at Public Works.
G ² SG Employee Incentive program		2009	Energy cost savings.	TBD	No cost.	TBD
Flex Fuel Pilot Program	Two flex-fuel squad cars were purchased for pilot program.	2009	Cost savings on fuel.	75,619 lbs.	\$46,496.00	TBD
Approved 2 nd Certified LEED Building	KwikTrip on Cardinal Lane proposed a building to meet LEED requirements.	2008	Reduced environmental impact of buildings.	TBD	No cost.	N/A
G ² SG Community Pledge	Residents can take the pledge to reduce their impact on the environment	2008	Encourages residents to be green.	TBD- depends on # of participants.	No cost.	N/A

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GEOMELT Purchase	GEOMELT, a beet juice de-icer was purchased to help reduce salt on roads.	2008	Reduces amount of salt used on roads; renewable, locally grown product.	N/A	\$4,400	Public Works is currently tracking results.
Pinewood Park Windows	Replaced 8 windows at Pinewood Park with double-paned windows	2008	Lower energy costs.	15,400 lbs.	\$450	Annual projected energy cost savings = \$455.82
Park Recycling Upgrades	Purchased 8 metal fusion recycling bins for Meadowbrook Park & Akzo Nobel Sports Complex	2008	Promote recycling and reduce tonnage in landfills.	N/A	\$3,400	N/A
Recycling Guide	Recycling flyer was created for residents.	2008	Promote recycling and reduce tonnage in landfills.	N/A	No cost.	N/A

*Annual CO₂ Reduction is an estimate based on online CO₂ calculators.