

General Electric GHG Data Management Tools

EPA Climate Leaders Meeting

Bob Schenker

October 6, 2008

ecomaginationSM



Introduction



GE Operational GHG Inventory

- Approximately 7 million metric tons in 2007
- Five components
 - Large Sites
 - Small Sites
 - Vehicles
 - Desalination Plants
 - Aircraft
- The following website presents more information
http://www.ge.com/citizenship/performance_areas/environment_health_safety_inv.jsp

Large Site Inventory

- Facilities included in the large site inventory
 - Manufacturing sites
 - Service/distribution centers > 50 employees
 - Television/movie studio and broadcast sites
 - Theme parks
 - Stand alone data centers
 - Major business headquarters
- 571 sites worldwide in 2007
- Significant majority of the inventory

GE PowerSuite® ...GHG Integration

GE PowerSuite History...

- Six Sigma tools used to identify EHS process needs
- Initial focus on digitizing compliance auditing, corrective action, and task management
- Originated in 1997 as 5 core web applications

GE PowerSuite Today...

- **Consists of over 50 EHS digitization applications focused on:**
 - Global compliance auditing and task management
 - Health & Safety workflow management tools, including multi-lingual interfaces
 - Environmental compliance management systems
 - EHS Management system implementation and reporting tools
- **Subscribed to by all GE businesses**
 - Consortium, shared subscriber model
 - Leveraged by non-EHS functions...Security, Sourcing, Quality, Compliance, Controllership
- **Recognized externally as “global, best-in-class EHS IT system”**
 - 2004-07 Dow Jones Sustainability Index (DJSI)– Best in Class, Adv Env. Mgmt System
 - 2005 U.S. Voluntary Protection Program (VPP) Participants Association – Innovation Award
 - 2007 Cited in ALM’s Corporate Counsel magazine’s Best Legal Department Award

GHG Inventory Survey Tool



GHG Inventory Survey

- Simple web-based interface for collecting activity data
- EPA Climate Leaders and eGRID sub-regional emission factors are used to calculate GHG emissions
- Extensive data analysis and reporting capabilities
- Annual reporting – Option for quarterly or monthly reporting

GHG Inventory Survey

Greenhouse Gas Inventory Survey
Click to return to Inside PowerSuite...

Welcome to the Greenhouse Gas (GHG) and Water Usage Survey Reporting Webtool, designed to provide a simple, streamlined interface to compile and analyze GHG emissions data reported annually by GE sites.

Sites Required to Enter Data (Jan. 1 - Mar. 15, 2008):	Required Survey Data for calendar year 2007:
<ul style="list-style-type: none">(1) All manufacturing sites (includes sites where at least some manufacturing, assembly or value added modification is made to GE products and all power generation and engine/turbine test facilities controlled by GE);(2) All service/distribution sites with > 50 employees (includes service shops, service locations, warehouses, distribution facilities, television and/or movie studio, broadcast and/or station operations, theme parks, office facilities that conduct bulk mail processing, and/or other facilities where a service is provided to customers from a fixed location controlled by GE);(3) All major business headquarters sites (e.g., Fairfield, Pittsfield); and(4) All existing sites in the 2004 and 2005 GHG Inventories that have not been closed or divested in 2006.	<ul style="list-style-type: none">(1) Quantity of Fuels Combusted (coal, oil, gas, other);(2) Quantity of Electricity consumed;(3) Quantity of Other Greenhouse Gases emitted; and(4) Quantity of Water consumed (Mandatory for sites that used 15,000,000 gallons or more of water in 2006).

[Search/Add GHG Energy reduction projects in GHG Project Deck](#)

[More info ...](#)

*Click [here](#) for more information on the applicability of this Webtool to your site.

To access the tool, please select your GE business and your Organization and Site from the drop-down lists. You must have permissions for your Site's GHG reporting page; if you have not already been assigned permissions, please use the links provided to you after you attempt to login to your Site below to request permissions from the Business Administrator.

Business:

Organization:

Site:

Open by default to this Selection

[Business Administrators](#)

Trusted sites

GHG Data Input Screen

Compliance Center T Center E Center Safety Center Chem Center Enablers User Support

GHG Input
Click to close window...

Robert Schenker
Demonstration / Corporate CEP

[View Greenhouse Gas FAQs](#)
[View Instructional Email Sent to Participating Sites](#)

- Update and Insert usage data as needed (Click for additional input rows)
- Use **X** to delete GHG records not needed
- Each type for coal usage, liquid fuel usage, alternative fossil fuels, and other GHG can only be used once.
- If usage type for coal, liquid fuel, alternative fossil fuel or other GHG is selected, * denotes required field
- If quantity for natural gas, electricity, or water is supplied, * denotes required field
- If data is not required to be entered for a particular usage type, 'Not Used' or 'Not Required to Report' must be selected from the type drop down list before verification of data.
- Please be sure to select appropriate Units for each record.**

Coal Usage In order to verify data if Coal Usage does not apply, "Not Used" must be selected from Type drop-down.

X Type: Not Used Qty*: 0.00 Units*: Units Record Type*: Meter Records Cost*: 0.00 (\$US)

Liquid Fuel Usage In order to verify data if Liquid Fuel Usage does not apply, "Not Used" must be selected from Type drop-down.

X Type: Distillate fuel (No. 1, 2, 4, diesel) Qty*: 150.00 Units*: gallons Record Type*: Purchase Records Cost*: 5250.00 (\$US)

Alternative Fuel Usage In order to verify data if Alternative Fuel Usage does not apply, "Not Used" must be selected from Type drop-down.

X Type: Not Used Qty*: 0.00 Units*: Units Record Type*: Meter Records Cost*: 0.00 (\$US)

Other Greenhouse Gas Emissions In order to verify data if Other Greenhouse Gas Emissions does not apply, "Not Emitted" must be selected from Type drop-down.

X Type: Other CO2 Sources Qty*: 95.00 Units*: kg Record Type*: Purchase Records Cost*: 190.00 (\$US)

Natural Gas Usage In order to verify data if Natural Gas Usage does not apply, "Not Used" must be selected.

X Used Not Used Qty: 48000000.00 Units*: Feet - Standard Cubic Record Type*: Meter Records Cost*: 528000.00 (\$US)

Electricity Usage

X Qty: 9200000.00 Units*: kWh Record Type*: Meter Records Cost*: 828000.00 (\$US)

Site Water Supplies If Site Water Supplies will not be provided, "Not Required to Report" must be selected from the Type drop-down in order to verify data.

X Type: Public or Commercial Qty: 400000.00 Units*: gallons Record Type*: Meter Records

X Type: River/Canal intake Qty: 600000.00 Units*: gallons Record Type*: Engineering Estimate

X Water Supplied for Non-Contact Cooling Water % of Above Total: 60.0 (600000.00 gallons) Record Type*: Engineering Estimate

Green Power and Other Credits

Purchase of Green Power: kWh **Note:** Supporting Documentation is Required. Please use the "Attach Supporting Documents" link

10 Hierarchical Menu Trees Created Trusted sites

GHG Data Input Screen

10 Hierarchical Menu Trees Created

Alternative Fuel Usage In order to verify data if Alternative Fuel Usage does not apply, "Not Used" must be selected from Type drop-down.

Type: Not Used Qty: 0.00 Units: [] Record Type: Meter Records Cost: 0.00 (\$US)

Other Greenhouse Gas Emissions In order to verify data if Other Greenhouse Gas Emissions does not apply, "Not Emitted" must be selected from Type drop-down.

Type: Other CO2 Sources Qty: 95.00 Units: kg Record Type: Purchase Records Cost: 190.00 (\$US)

Natural Gas Usage In order to verify data if Natural Gas Usage does not apply, "Not Used" must be selected.

Used Not Used Qty: 48000000.00 Units: Feet - Standard Cubic Record Type: Meter Records Cost: 528000.00 (\$US)

Electricity Usage

Qty: 9200000.00 Units: kWh Record Type: Meter Records Cost: 828000.00 (\$US)

Site Water Supplies If Site Water Supplies will not be provided, "Not Required to Report" must be selected from the Type drop-down in order to verify data.

Type: Public or Commercial Qty: 400000.00 Units: gallons Record Type: Meter Records

Type: River/Canal intake Qty: 600000.00 Units: gallons Record Type: Engineering Estimate

Water Supplied for Non-Contact Cooling Water % of Above Total: 60.0 (600000.00 gallons) Record Type: Engineering Estimate

Green Power and Other Credits

Purchase of Green Power: [] kWh **Note:** Supporting Documentation is Required. Please use the "Attach Supporting Documents" link provided below to include documentation of Green Power credits.

Export of Electric Power or Heat: [] kWh

Production Ratio

Production Ratio for 2006: 1.05
Basis for Production Ratio for 2006: No of widgets produced in 2006 vs 2005

Overall GHG Comments for 2006: Comments

Production Ratio*: 1.1 *Note: Production Ratio is set to 1.0 for first year.

Basis for Production Ratio (e.g. Revenues, Production, etc.) 500 max. chars: No of widgets produced in 2007 vs 2006

Verify Input Data & Comments

Attach supporting documents: * [Click here to attach or view Greenhouse Gas files for site's 2007 reporting year.](#)

Additional Comments: (Location of documents that verify GHG input, business specific information, explanation of special circumstances (e.g. electricity sales), etc.) 500 max. chars: Relamping reduced electricity use.

Input usage data for site is complete? Enter "No" if you plan to return to enter additional data: Yes (Verified By: Robert Schenker)

Trusted sites

GHG Data Summary

State: (U.S. only):		Connecticut	Reporting Year:		2007					
Country:		U.S.	Production Factor:		1.1					
GHG Comments:		Relamping reduced electricity use.	Production Factor Basis:		No of widgets produced in 2007 vs 2006					
Attached Documents:		EFS_GHG_Calculations.xls (Caption: 2004 Demo) Jet A1_Fuel_Used_Malaysia_2005.xls (Caption: 2005 Demo) 2006_Natural_Gas_Unit_Costs_4-03-07.xls (Caption: 2006 Demo) C I VAG - Hajdub0szormeny_Purchased_Energy_Emissions_4-17-08.xls (Caption: 2007 Demo)								
Input Summary & Emission Calculations										
*Note: Emissions calculated from electricity consumption DO NOT take into account transmission losses.										
	Qty 2006	Unit of Measure 2006	Qty 2007	Unit of Measure 2007	Cost 2006 (U.S. Dollars)	Unit Cost 2006 (U.S. Dollars)	Cost 2007 (U.S. Dollars)	Unit Cost 2007 (U.S. Dollars)	Emission Calculation 2006 (Metric Tons CO ₂ Equivalents)	E
Coal Usage										
Not Used	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Liquid Fuel Usage										
Distillate fuel (No. 1, 2, 4, diesel)	1,450.00	gallons	150.00	gallons	\$ 4,350.00	\$ 3.00	\$ 5,250.00	\$ 35.00	14.56	
Alternative Fossil Fuels										
Not Used	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Other GHG										
Other CO2 Sources	100.00	metric tons	95.00	kg	\$ 200.00	\$ 2.00	\$ 190.00	\$ 2.00	100.00	
Natural Gas Usage										
Natural gas (dry)	47,000,000.00	Feet - Standard Cubic	48,000,000.00	Feet - Standard Cubic	\$ 470,000.00	\$ 0.01	\$ 528,000.00	\$ 0.01	2,547.40	
Electricity Usage										
Electricity	9,700,000.00	kWh	9,200,000.00	kWh	\$ 776,000.00	\$ 0.08	\$ 828,000.00	\$ 0.09	8,051.00	7,6
Site Water Supplies										
Public or Commercial	400,000.00	gallons	400,000.00	gallons	\$ 0.00	\$ 0.00	N/A	N/A	N/A	
River/Canal intake	600,000.00	gallons	600,000.00	gallons	\$ 0.00	\$ 0.00	N/A	N/A	N/A	
Non-Contact Cooling Water										
Non-Contact Cooling Water	600,000.00	gallons	600,000.00	gallons	\$ 0.00	\$ 0.00	N/A	N/A	N/A	
Total:					\$ 1,250,550.00		\$ 1,361,440.00		10,712.96	

GHG Data Summary

	Qty 2006	Unit of Measure 2006	Qty 2007	Unit of Measure 2007	Cost 2006 (U.S. Dollars)	Unit Cost 2006 (U.S. Dollars)	Cost 2007 (U.S. Dollars)	Unit Cost 2007 (U.S. Dollars)	Emission Calculation 2006 (Metric Tons CO ₂ Equivalents)	Emission Calculation 2007 (Metric Tons CO ₂ Equivalents)
Summary & Emission Calculations										
Emissions calculated from electricity consumption DO NOT take into account transmission losses.										
Reporting Year:	Connecticut				Reporting Year:		2007			
Production Factor:	U.S.				Production Factor:		1.1			
Production Factor Basis:	Relamping reduced electricity use.				Production Factor Basis:		No of widgets produced in 2007 vs 2006			
Documents:	EFS GHG Calculations.xls (Caption: 2004 Demo) Jet A1 Fuel Used Malaysia 2005.xls (Caption: 2005 Demo) 2006 Natural Gas Unit Costs 4-03-07.xls (Caption: 2006 Demo) C I VAG - Haidub0szormeny Purchased Energy Emissions 4-17-08.xls (Caption: 2007 Demo)									
Summary & Emission Calculations										
Emissions calculated from electricity consumption DO NOT take into account transmission losses.										
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fossil Fuels										
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Usage										
Fuel (No. 1, 2, 4, diesel)	1,450.00	gallons	150.00	gallons	\$ 4,350.00	\$ 3.00	\$ 5,250.00	\$ 35.00	14.56	1.51
Gas Usage										
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Sources										
Gas Sources	100.00	metric tons	95.00	kg	\$ 200.00	\$ 2.00	\$ 190.00	\$ 2.00	100.00	0.10
Gas Usage										
Gas (dry)	47,000,000.00	Feet - Standard Cubic	48,000,000.00	Feet - Standard Cubic	\$ 470,000.00	\$ 0.01	\$ 528,000.00	\$ 0.01	2,547.40	2,601.60
Electricity Usage										
	9,700,000.00	kWh	9,200,000.00	kWh	\$ 776,000.00	\$ 0.08	\$ 828,000.00	\$ 0.09	8,051.00	7,636.00
Water Supplies										
Commercial	400,000.00	gallons	400,000.00	gallons	\$ 0.00	\$ 0.00	N/A	N/A	N/A	N/A
Water intake	600,000.00	gallons	600,000.00	gallons	\$ 0.00	\$ 0.00	N/A	N/A	N/A	N/A
Water Usage										
	600,000.00	gallons	600,000.00	gallons	\$ 0.00	\$ 0.00	N/A	N/A	N/A	N/A
Water Usage										
					\$ 1,250,550.00		\$ 1,361,440.00		10,712.96	10,239.20

Site Profile Information

Compliance Center T Center E Center Safety Center Chem Center Enablers User Support

Site Profile Information
Click to return to the Greenhouse Gas Inventory Survey homepage...

Reports

Profile Summary

Profile Type: Manufacturing
Country: U.S. State: Connecticut

Is your site using EMIS? [?](#)

Add GHG/Energy reduction projects to GHG Project Deck
[More info...](#)

Demonstration may be eligible for **eCO₂ Star Certification** [?](#)

	Reporting Year		Total Energy Use (MMBtu)	Total Emissions (Metric Tons CO ₂ Equivalents)	Total Energy Cost (\$US - Water cost excluded)	Total Water Usage (Gallons)	Production Factor	Verified (Complete)
	2008	Q1	20,171.60	2,559.40	339,000.00	100,000.00	n/a	Yes
	2008	Q2	18,803.40	2,422.20	319,000.00	100,000.00	n/a	Yes
	2008	Q3	18,975.70	2,366.30	315,500.00	100,000.00	n/a	Yes
	2007		80,707.25	10,239.20	1,361,440.00	1,000,000.00	1.1	Yes
	2006		81,566.95	10,712.96	1,250,550.00	1,000,000.00	1.05	Yes
	2005		94,239.40	12,232.06	1,269,210.00	1,000,000.00	1.2	Yes
	2004		85,678.50	11,125.06	1,003,200.00	1,000,000.00	1.0	Yes

Emissions by Year

Legend:

- Distillate fuel (No. 1, 2, 4, diesel)
- Electricity
- Natural gas (dry)
- Other CO₂ Sources

+ Data Key

Click to edit 2007 GHG data

Trusted sites

GHG Reports

GHG Reports
Click to close window...

Compliance Center T Center E Center Safety Center Chem Center Enablers User Support

Robert Schenker
Demonstration / Corporate CEP

Emissions/Cost Totals Report GHG Impact Report Search GHG Projects

- Use GHG Reports to find Emission Calculation and Cost totals, Verification Status, Data Recorded, Verification dates and Total Quantities.
- Click site link to view GHG Data Summary for each Location.
- In multiple select boxes, hold Ctrl key to select multiple fields

Demonstration may be eligible for **eCO₂ Star Certification***

1 Choose Scope and Date	2 Limit By Criteria	3 Report Options
<p>Business: GE Company Reporting Year: 2007</p> <p>Business Unit: All</p> <p>Organization: All</p> <p>Site: All</p> <p>Include Archived Sites: <input checked="" type="checkbox"/></p> <p>Country: All State: (U.S.) World Region: All</p> <p>Albania, Algeria, Angola, Argentina, Armenia, Australia, Alabama, Alaska, Arizona, Arkansas, California, Colorado, Asia/Pacific, Canada, Europe/Middle East/Africa (EMEA), Latin America, Mexico, U.S.</p> <p>State selection available when U.S. is the only country selected.</p>	<p>Data Status: All</p> <p>Usage Type: All, Alternative Fossil Fuels, Coal Usage, Electricity Usage, Liquid Fuel Usage, Natural Gas Usage, Non-Contact Cooling Water</p> <p>Sub Usage Type: Total</p>	<p>Total By: (First grouping level) Geographic Location - Country</p> <p>Sub Total By: (Second grouping level) Sub Usage Type</p> <p>Sort By: <input checked="" type="radio"/> Organization/Site <input type="radio"/> Verification Status</p>
<p>4 Get Report</p> <p><i>Tip: GHG records meeting the filter criteria for Scope, Date, and Data Criteria will be shown grouped by the Total and Sub Total options selected above. If a Sub Total By is not selected, the report will provide Emission and Cost totals. If a Sub Total By is selected, the ability to drill down to the individual site level will be provided.</i></p>		

Start Microsoft PowerPoint - [...] http://powersuite.ge.com GHG Reports - Micros... 2:07 PM

GHG Project Deck Tool



GHG Project Deck

- Best practice sharing tool for energy and GHG reduction projects
- Project task/milestone tracking
- Year specific tracking of reductions and costs
- Data mining and reporting
- Communication mechanisms for sharing best practices
- Integration with the GHG Inventory Survey

GHG Project Deck

The screenshot shows a web browser window with the title "GHG Project Deck" and a subtitle "Click to return to Inside PowerSuite...". The browser's address bar is empty. The page content includes a welcome message, a list of features, a "More info..." link, and a login form. The login form has three dropdown menus for "Business" (GE Corporate), "Organization" (Corporate CEP), and "Site" (Demonstration), along with a "Log in" button and a checkbox for "Open by default to this Selection". The browser's status bar at the bottom shows "Done" and "Trusted sites".

GHG Project Deck
Click to return to Inside PowerSuite...

Welcome to the GHG Project Deck, designed to provide a streamlined interface for Sites to manage their Greenhouse Gas (GHG) reduction and energy reduction projects and for Site, Business, and Corporate leaders to share best practices and evaluate projects across GE. The GHG Project Deck is an important component of the GE ecomaginationsm commitments.

The GHG Project Deck:

- Provides Sites a streamlined method for sharing projects
- Enables Site, Business, and Corporate leaders to search, evaluate, and share across GE
- Enables evaluation of project impact on GHG reduction and energy reduction goals

[More info...](#)

To access the tool, please select your GE business, Organization, and Site from the resulting drop-down lists (*please allow page refresh after Business selection*). You must have permissions to your Site's GHG Project Deck homepage; if you have not already been assigned permissions, please use the links provided to you after you attempt to login to your Site below to request permissions.

Business:
GE Corporate

Organization:
Corporate CEP

Site:
Demonstration

Open by default to this Selection

Log in

Done Trusted sites

Add Project Screen

Add Project
Click to close window...

Robert Schenker
Demonstration / Corporate CEP

+ Add Project **Reports**

Note: Required fields indicated by red asterisk (*)

Add GHG Project Deck

Project Name: *

Start Date: *

End Date:

Attachments: [Click to add/edit/view attachments.](#)

Project Description: * (Max. 2000 chars.)

GE Products & Services

GE Products & Services Description: (Max. 1000 chars.)

GE Products & Services Cost: US \$

In Progress Notes:

Status: *

Project Type: * [Request New](#)

Energy Type: *

Project Lead: *
 Me My Co-Workers Lookup

Project Team:

Project Costs

Investment Cost: * US \$

Expense Cost: * US \$

O&M Cost: * US \$/year

Benefits

GHG Reduction: * metric tons/year

Energy Savings: *
[Select Parameter]
[Unit] / year

Cost Savings: * US \$/year

Evaluation Criterion: *

Add Project **Cancel** **Clear Form**

Done Trusted sites

Site Project Summary

Compliance Center T Center E Center Safety Center Chem Center Enablers User Support

GHG Project Deck
Click to return to the GHG Project Deck homepage...

Robert Schenker
Demonstration / Corporate CEP

- Click **Add Project** button to add new project
- To **View/Edit** existing project, click the Project Name in project list below

Demonstration may be eligible for **eCO₂ Star Certification***

Demonstration Project Summary

Project Start Date Between: and
 Project Completion Between: and
 GHG Reduction > = metric tons/year
 Keyword Search:

Project Type:
 Project Status:
 Cost Savings > = US\$/year

Forward As Email	Organization / Site Project Name ID# (Status) Project Lead	Project Type Project Description & Notes (..if available)	Start Date End Date	GHG Reduction	Energy Savings	Cost Savings	Evaluation Criterion	Expense Cost	Investment Cost	O&M Cost
	Corporate CEP / Demonstration Building 23 Re-lamping ID#10 (Scheduled) Donavan Hornsby	Project Type: Lighting (re-lamping, timers, switches, etc.)	1-Mar-06 31-Jul-06	11,200 metric tons/year	3,428,000 kWh Electricity/year	\$ 17,000.00/year	18.0 Payback (in months)	\$ 6,000.75	\$ 40,000.00	\$ 0.00/year
	Corporate CEP / Demonstration Re-Lamp Project 2 ID#47 (Proposed) David Lauridsen	Project Type: Insulation Description: Test	24-Mar-06 <i>None Specified</i>	-1,000 metric tons/year	5 gallons Jet Fuel/year	\$ 10,000.00/year	5.0 Return On Investment	\$ 100.00	\$ 5.00	\$ 5.00/year
	Corporate CEP / Demonstration Water Usage Reduction Test ID#1244 (Proposed) Rohi Singh	Project Type: Water Usage Reduction Description: test	3-Jul-08 <i>None Specified</i>	0 metric tons/year	<i>None Listed</i>	\$ 6,000.00/year	67.0 Average Savings Factor	\$ 5,000.00	\$ 5,000.00	\$ 100.00/year
	Corporate	Project Type:	10-Jan-07	1,000 metric tons/year	2,000 MWh Natural gas (dry)/year	\$ 11,000.00/year	30.0	\$ 10,000.00	\$ 29,000.00	\$ 4,000.00/year

Done Trusted sites

Reports Page

GHG Project Deck - Reports - Microsoft Internet Explorer provided by General Electric

File Edit View Favorites Tools Help SupportCentral

Reports
Click to close window...

GHG Impact Report

Demonstration may be eligible for eCO₂ Star Certification*

Robert Schenker
Demonstration / Corporate CEP

GHG Project Deck Report

Show/Hide Report Criteria

Business: GE Company Project Start Date Between: and
Business Unit: Project Completion Between: and
Organization: All Site: All
Project Status: All, Proposed, Scheduled, In Progress, On Hold, Cancelled
Investment Cost: <= US\$
Project Type: All, [New project type awaiting approval], Alternate sources of fuels, Awareness (dashboards, procedures, etc.)
Expense Cost: <= US\$
Energy Type: All, Alternative Fossil Fuels, Coal, Electricity, Liquid Fuel, Natural Gas
O&M Cost: <= US\$/year
GHG Reduction: >= metric tons/year
Evaluation Criterion: >=
Cost Savings: >= US\$/Year
Keyword Search:
 Only Projects Using GE Products and Services
Sort By: Start Date DESC
Output Format: Show Projects Reset

Fields to Display: Project Dates, Energy Type, GHG Reduction, Energy Savings, Cost Savings, Evaluation Criterion, GE Products & Services Used, Expense Cost, Investment Cost, O&M Cost

Done
Trusted sites
Start Ecomagination - Mi... GE GHG Inventory ... http://powersuite... GHG Site Data Sum... Microsoft PowerPoi... GHG Project Dec... 11:29 AM

GHG Impact Report

The screenshot shows a web browser window titled "GHG Project Deck - GHG Impact Report - Microsoft Internet Explorer provided by General Electric". The browser's address bar contains "SupportCentral". The page header includes the GE logo, the text "GHG Impact Report", and a user profile for "Robert Schenker" with the role "Demonstration / Corporate CEP".

The main content area is titled "GHG Impact Report" and contains a "Show/Hide Report Criteria" section. This section includes several filters and options:

- Business:** GE Company
- Business Unit:** All
- Organization:** All
- Site:** All
- Include Archived Sites:**
- Project Start Date Between:** [] and []
- Project Completion Between:** [] and []
- Reporting Years Displayed (max 2):** 2008, 2007, 2006, 2005
- Project Status:** []
- Project Type:** []
- Project Energy Type:** []
- Project Keyword Search:** []
- Sort By:** Business, Org, Location
- Output Format:** [] [] [] []

On the right side, there is a "Fields to Display" list with the following items:

- Total Emissions for Years Selected*
- Production Factor for Years Selected*
- Total Energy Use for Years Selected*
- Emissions Change %*
- Total Energy Cost for Years Selected*
- Project-Based Emission Reduction
- Project-Based Cost Savings Per Year
- Total Project Cost (One Time)
- Project Cost Per Year (O & M)

At the bottom of the filter section, there are "Show Report" and "Reset" buttons. The browser's status bar shows "Done" and "Trusted sites". The Windows taskbar at the bottom includes the Start button, several application icons, and the system tray showing "3:59 PM".

eCO2 Star Award Application Tool



eCO2 Star Award Application

- Award presented to sites that demonstrate 5% absolute “additional” reductions
- GE sites must apply for this award
- Incorporates GHG emissions, energy use and production factor information from the GHG Inventory Survey
- Incorporates energy and GHG reduction projects from the GHG Project Deck
- Allows addition of supplemental data
- Provides standard application format

Application Data Entry Screen

Contact Person: Bob Schenker

Phone / Dial-Com Number: (203) 373-2691

Contact Email Address: Bob.Schenker@ge.com

Reporting Year 2004 Baseline Emissions: 11125.06 MT CO₂
(in Metric Tons CO₂)

Reporting Year 2007 Emissions: 14726.84 MT CO₂
(in Metric Tons CO₂)

Reporting Year 2004 Baseline Energy Usage: 85678.50 MMBtu
(in MMBtu's)

Reporting Year 2007 Energy Usage: 116484.22 MMBtu
(in MMBTU's)

Production Factors: 1.00 (2004) 1.20 (2005) 1.05 (2006) 1.10 (2007)
[GHG / Water Usage Survey](#)

Describe any and all significant changes in production, outsourcing, building / process closures or headcount that might affect GHG or energy use:
Production has increased.

Describe Site-Specific Energy Efficiency Measures and/or intensity benefits:
Relamping Projects

Select the specific projects or actions responsible for achieving GHG reduction and provide the annual GHG reduction expected to be received by each project. Include those projects that you would recommend for translation to similar GE sites:
47 | Re-Lamp Project 2 | Insulation | Proposed
422 | Test Project | Alternate sources of fuels | In Progress
1009 | Test Project Again | Communication | Proposed
1077 | Test Project 2 | Alternate sources of fuels | Proposed
[GHG Project Deck](#)

Describe your "eco" Communication Plan:
Ecoweek and monthly newsletter.

Cost of GE Products and Services used or planned: GE Product and Service costs will be automatically populated using the data input for GHG Project Deck projects selected above.

Select any current (2008) projects driving energy efficiency:
422 | Test Project | Alternate sources of fuels | In Progress
1009 | Test Project Again | Communication | Proposed
1077 | Test Project 2 | Alternate sources of fuels | Proposed
1244 | Test | Water Usage Reduction | Proposed
[GHG Project Deck](#)

eCO2 Star Award Application

2008 eCO₂ STAR & Awards Application

Site:		Contact Person:	Bob Schenker
Address:	..	Dial-Com Number:	(203) 373-2691
Business / Orgname:		Contact Email Address:	Bob.Schenker@ge.com

Reporting Year 2004 Baseline GHG Emissions: (GHG Inventory)	11125.06 (MT CO ₂)	Reporting Year 2004 Baseline Energy Usage: (GHG Inventory)	85678.50 (MMBtu)
Reporting Year 2008 GHG Emissions: (GHG Inventory)	14726.84 (MT CO ₂)	Reporting Year 2008 Energy Usage: (GHG Inventory)	116484.22 (MMBtu)
Absolute GHG Reduction:	-32.38 %	MMBtu Energy Reduction:	-35.96 %
Production Factors:	1.00 (2004) 1.20 (2005) 1.05 (2006) 1.10 (2007)		

Describe significant changes in production, outsourcing or building / process closure or headcount that might have affected GHG output or energy use.	Production has increased.												
Describe Site-Specific Energy Efficiency measures and/or intensity benefits. (e.g. MT CO ₂ /unit production or MT CO ₂ /\$revenue, etc.)	Relamping Projects												
List specific projects or other actions responsible for achieving GHG reduction and provide the annual GHG reduction expected to be received by each project. Include those projects that you would recommend for translation to similar GE sites.	<table border="1"> <thead> <tr> <th>Project ID</th> <th>Project Title</th> <th>Project Type</th> <th>Project Status</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>Building 23 Re-lamping</td> <td>Lighting (re-lamping, timers, switches, etc.)</td> <td>Scheduled</td> </tr> <tr> <td>47</td> <td>Re-Lamp Project 2</td> <td>Insulation</td> <td>Proposed</td> </tr> </tbody> </table>	Project ID	Project Title	Project Type	Project Status	10	Building 23 Re-lamping	Lighting (re-lamping, timers, switches, etc.)	Scheduled	47	Re-Lamp Project 2	Insulation	Proposed
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47	Re-Lamp Project 2	Insulation	Proposed										
<ul style="list-style-type: none"> Describe "eco" communication plan Attach copy of Energy / GHG Dashboard Attach copy of MOC process 	Ecoweek and monthly newsletter.												
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* Emissions reductions deriving from outsourcing, staffing reductions, production decreases, partial closure, and other similar actions would only count if taken as part of an energy efficiency improvement plan. ** Attach documentation / calculations of reductions.

Lessons Learned



Lessons Learned – Data Entry

- Data is only as good as the data entered
- Keep it simple
- Provide Training
- Provide assistance to sites
- Design in quality assurance tests
- Provide quality assurance reviews

Lessons Learned – Tool Performance

- Programmers make mistakes
- Integration of tools can be problematic
- Beware of major structural changes
- Test everything
- Always be on the lookout for “gremlins”

Questions

