



Hartz Mountain Industries, Inc
Environmental Assessment:
Green MOU Report
September 25, 2012



Environmental Protection Agency
Region 2

Andrew Bellina, PE
Senior Policy Advisor
212-637-4126

Jose Pillich
Michael Wanser
Research Analysts

Accomplishments

Reductions of 34,250 MTCO₂e



Memorandum of Understanding

On March 11, 2010, Hartz Mountain Industries signed a Memorandum of Understanding (MOU) pledging to become an environmental steward by implementing a number of green initiatives that would reduce its carbon footprint and further improve our planet's environment. This partnership with the United States Environmental Protection Agency (EPA) and Hartz Mountain Industries has resulted in reducing energy, water and solid waste production across all Hartz' operations.

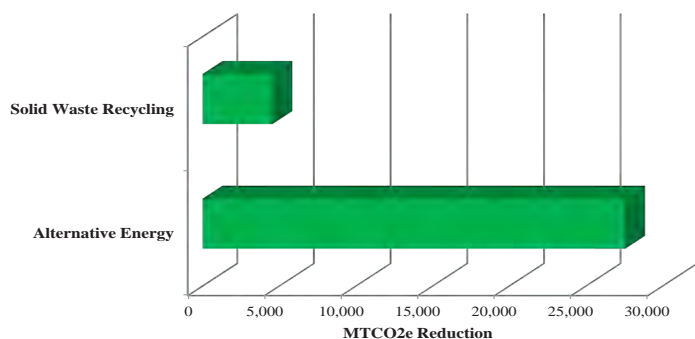
Reduction in Environmental Footprint

In the last few years, Hartz Mountain Industries has provided three updates documenting its green initiatives. The EPA has analyzed the submitted information and developed an environmental footprint reduction estimate for the organization. Due to the progressive green efforts of the organization, Hartz Mountain Industries has managed to reduce its carbon footprint by 34,250 MTCO₂e* and saved an estimated \$3,623,000 in operating expenses.

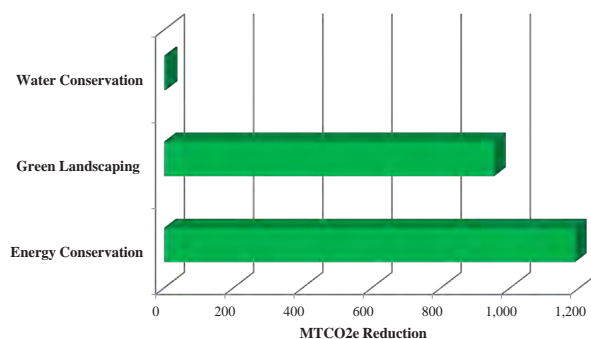
Environmental Metrics	Total Sector (MTCO ₂ e)
Energy Conservation	1,187.9
Alternative Energy	27,553.4
Water Conservation	5.0
Solid Waste Recycling	4,550.4
Green Landscaping	954.1
Total (MTCO ₂ e)	34,250.8

*Metric Ton Carbon Dioxide Equivalent

Primary Initiatives



Secondary Initiatives



Measurement and Continuous Improvements

EPA uses these environmental conversion models to calculate metric tons of carbon dioxide equivalents:

Greenhouse Gas Equivalencies (GHG) Calculator converts GHG reductions into scenarios that can be easily communicated to the public. eGRID Version 1.1 (2007) which converts standard metrics for electricity, green energy, fuel use, chemical use, water use, and sustainable materials management into MTCO₂e.

The EPA WARM Model which helps calculate GHG emission reductions from several different waste management practices, including source reduction, recycling, combustion, composting and landfilling.

The EPA Pollution Prevention (P2) Cost Calculator which estimates cost savings associated with GHG reductions.

Certain environmental data points cannot be converted to MTCO₂e because scientific models do not currently exist.

As methodologies improve, environmental assessments will be updated to include any new GHG reduction estimates.

Accomplishments

Reductions of 34,250 MTCO₂e

Greenhouse Gas Equivalencies

What does the reduction of 34,250 MTCO₂e represent ?

The organization's effort is equivalent to any of the following:

- Annual greenhouse gas emissions from 6,716 vehicles



- Carbon dioxide emissions from 3,839,776 gallons of gasoline



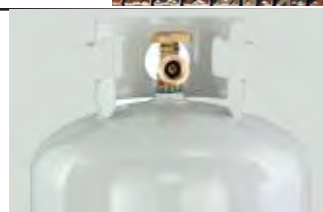
- Carbon dioxide emissions from 79,653 barrels of oil consumed



- Carbon dioxide emissions from the energy use of 2,965 homes for one year



- Carbon dioxide emissions from 1,427,117 propane tanks used for home barbeques



- Carbon dioxide emissions from gasoline carried by 452 tanker trucks



- Carbon dioxide emissions from burning 187 railcars' worth of coal (over 2.8 miles long)





Environmental Metrics	Mar 2010 MOU	Oct 2010 Update	Sep 2011 Update	Sept 2012 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
Energy Conservation/Energy Star						
Total Savings (MTCO2e)		1,346.3	52.0	(210.4)	1,187.9	\$255,137
Miscellaneous Energy Conservation		1,373,568 kwh	(89,718 kwh)	273,142 kwh	748.1	\$160,682
Web Based Energy Competition						
Motors and transformers						
Lighting Project Fixtures (Bulbs and Ballast)						
High Temp Hot Water Pipe Replacement						
HVAC, Chiller & Electrical						
Bulb Replacement (CFLs, LEDs)				1500 bulbs (incl. in Misc.)		
Gas Savings		3,150 GJ/875,000 kwh	(307 GJ/85,280 kwh)	(993 GJ/275,833 kwh)	246.9	\$53,038
Steam Savings		1,580,910 lbs/553,230 kwh	809,300 lbs/283,210 kwh	(1,243,440 lbs/435,113 kwh)	192.8	\$41,417
Fuel Oil Savings						
Alternative Energy						
Total Savings (MTCO2e)		3,212.6	8,202.9	16,138.0	27,553.4	\$3,094,865
On-Site Solar (7.4 MW)		3,800,000 kwh	8,200,000 kwh	19,099,000 kwh	23,585.5	\$3,206,307
On-Site Wind						
On-Site Geothermal						
On-Site Combined Heat and Power						
Purchase of Green Energy/Green Power		436,000 kwh	2,616,000 kwh	2,180,000 kwh	3,968.0	(\$111,442)
Water Conservation/WaterSense						
Total Savings (MTCO2e)		1.6	1.7	1.7	5.0	\$3,627
Miscellaneous Water Conservation						
Low Flow/Hands Free Faucets (64)			32,000 gal	32,000 gal	0.2	\$117
Low Flow Toilets						
Low Flow Shower Heads						
Low Flow Urinals						
Waterless Urinals (16)		640,000 gal	640,000 gal	640,000 gal	4.8	\$3,510
Solid Waste Recycling						
Total Savings (MTCO2e)		193.7	1,874.1	2,482.6	4,550.4	\$63,420
Mixed Recyclables (includes Wastewise)		67.5 tons	653 tons	865 tons	4,550.4	\$63,420
Pallets Waste Avoided/Wood Recycled						
Steel Recycled during Deconstruction						
Concrete Recycled						
Asphalt Recycled						
Ceiling Tiles Recycled						
Carpet Recycled						
Recycled C & D Waste (Construction Waste)						
Cardboard (construction/non-construction/sharp containers)						
Mixed Metal (construction/non-construction)						
Paper, Mixed						
Plastic, Mixed (construction/non-construction/ sharp containers)						
Blue Wrap						
Can / Bottle Recycling						



Environmental Metrics	Mar 2010 MOU	Oct 2010 Update	Sep 2011 Update	Sept 2012 Update	Total Conversion (MTCO _{2e})	Cost Savings (Est.)
Mixed Organics						
Food Donation (Waste diversion)						
Biosolids & Food Waste Recycling / Composting						
Fluorescent Bulbs						
Waste Oil Recycled						
Magazines/ThirdClass Mail						
Newspaper						
Office Paper						
Textbooks						
Phonebooks						
Dimensional Lumber						
Fly Ash						
Aluminum Cans						
Glass						
HDPE						
LDPE						
PET						
Appliances						
Non-Ferrous Metals						
Fats, Oils, Grease						
Green Procurement						
Total Savings (MTCO_{2e})						
Re-Use/Purchase of Materials with Recycled Content						
Purchase / Use of Compost Socks						
Purchase of EPEAT Products						
Use of Recycled Steel during Construction						
Use of Recycled Iron during Construction						
Use of Recycled Plastic during Construction						
Use of Recycled Aluminum during Construction						
Use of Recycled Concrete / Asphalt during Construction						
Use of Coal Combustion Products						
Green Landscaping						
Total Savings (MTCO_{2e})			4.6	949.5	954.1	\$206,667
Green Roofs						
Porous Pavement						
Grass						
Low/no mow area						
Re-use of Collected Stormwater						
On-Site Re-use of Compost / Mulch						
Moisture Sensing Sprinklers						
Number / Acres of Trees						
Reflective Roof				630,000 sq ft	945.0	\$200,000
Synthetic Turf						
Native Plants						



Environmental Metrics	Mar 2010 MOU	Oct 2010 Update	Sep 2011 Update	Sept 2012 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
Leaves Composted						
Water Efficient Plants		Yes	1,823,624 gallons	1,823,624 gallons	9.1	\$6,667
Drip Irrigation System		Yes	Yes	Yes		
Replace Inefficient Sprinklers		Yes	Yes	Yes		
Electronics/EPEAT						
Total Savings (MTCO2e)						
Recycling of Electronics						
Re-Use/Donation of Used Computers						
Toner/Ink Recycling and Use of Recycled Ink						
Battery Recycling						
Mass Transit						
Total Savings (MTCO2e)						
Miles Avoided						
Transportation						
Total Savings (MTCO2e)						
Hybrid Vehicles						
Electric Vehicles						
Biodiesel Vehicles						
Clean Construction Vehicles						
LNG Vehicles						
Alternate Fuel Vehicles (Zipcar)						
Smartway Transporters						
Bike Racks						
LEED Projects						
Total Savings (MTCO2e)						
Silver - 10%						
Gold - 17%						
Platinum - 20%						
Misc. - Further Clarification						
Total Savings (MTCO2e)						
NOX (equipment only)						
NOX (includes vehicles)						
MTCO2e Savings						
Total (MTCO2e)		4,754.2	10,135.2	19,361.3	34,250.8	\$3,623,716
Energy Conservation/Energy Star		1,346.3	52.0	(210.4)	1,187.9	\$255,137
Alternative Energy		3,212.6	8,202.9	16,138.0	27,553.4	\$3,094,865
Water Conservation/WaterSense		1.6	1.7	1.7	5.0	\$3,627
Solid Waste Recycling		193.7	1,874.1	2,482.6	4,550.4	\$63,420
Green Landscaping		0.0	4.6	949.5	954.1	\$206,667



2012

Hartz Mountain Industries Additional Green MOU Accomplishments and Cost Savings

Energy Use

Hartz's office building at 707 Broad Street, Newark received its second Energy Star Award in December 2011.

In 2012, Hartz's building located at 200 Plaza Drive, Secaucus also received an Energy Star Award.

Improvements made to the Sheraton Lincoln Harbor Hotel demonstrated a 15.2% decrease in energy usage between May 2011 and May 2012.

Additionally, Hartz has installed free cooling coils in its flagship office building located at 667 Madison Avenue in Manhattan. This equipment will allow individual floor/tenant units to run their HVAC using outside air rather than conditioned air, thereby allowing tenants to take advantage of natural cooling during fall days.

LEED Certification

The office buildings at 200 and 400 Plaza Drive both attained LEED Certified status and an upgrade to LEED Silver status is pending for 400 Plaza Drive.

Solar Development

Hartz continues to lead the way in utilizing its available roofs for solar energy development. Hartz is now listed by the Solar Energy Industries Association as one of the top 20 corporate solar users in the United States.

Hartz has constructed an additional 3.38 MW of solar rooftop arrays. Of this new construction, 1.67 MW has been activated, and the balance of 1.71 MW is expected to come online within the next two months. When activated, the total rooftop photovoltaic arrays in Hartz's portfolio will have increased to 10.7 MW.

In November 2011, Hartz activated its first ground-mount solar array, an 8.5 MW facility located on a former farm and quarry site in Hamilton, New Jersey. Power is being sold to the utility grid.

Lighting Improvements

Hartz is in the process of replacing all lighting fixtures in their underground and outdoor garages. High-pressure sodium and metal halide fixtures are being replaced with high-efficiency fluorescent lights. Not only are the new lights substantially more energy efficient, but they are brighter as well.

They have also started a program of changing out all parking area lights with energy efficient lighting systems that will not only reduce electric consumption but increases the amount of light output.

Hartz is also completing the installation of motion sensors in all office building stairwells.