

Hartz Mountain Industries, Inc Environmental Assessment: Green MOU Annual Report November 5, 2014



Environmental Protection Agency Region 2

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Accomplishments Reductions of 71,043 MTCO2e





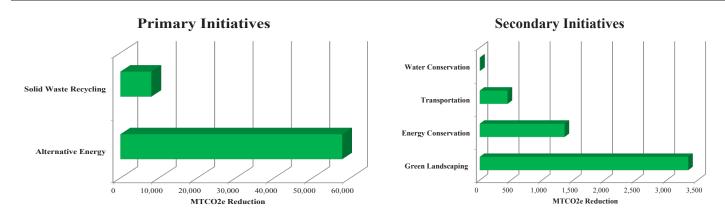
Memorandum of Understanding

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 five 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 71,043 MTCO2e* and saved an estimated \$10.7 million in operating expenses.

Environmental Metrics	Total Sector (MTCO2e)			
Energy Conservation	1,360.6			
Alternative Energy	57,836.8			
Water Conservation	7.8			
Solid Waste Recycling	8,044.3			
Green Landscaping	3,347.6			
Transportation	446.0			
Total (MTCO2e)	71,043.1			



*Metric Ton Carbon Dioxide Equivalent

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) and the EPA Pollution Prevention (P2) GHG Conversion Tool which convert standard metrics for electricity, green energy, fuel use, chemical use, water use, and sustainable materials management into MTCO2e.

Use 'total' factor for energy savings and 'non-baseload' factor for alternative energy.

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 estimates cost savings associated with GHG reductions. Certain environmental data points cannot be converted to MTCO2e because scientific models do not currently exist.

Accomplishments Reductions of 71,043 MTCO2e



Greenhouse Gas Equivalencies

What does the reduction of 71,043 MTCO2e represent ? The organization's effort is equivalent to any of the following:





Environmental Metrics	Mar 2010 MOU	Oct 2010 Update	Sep 2011 Update	Sept 2012 Update	Sept 2013 Update	Sept 2014 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
Energy Conservation/Energy Star								
		1,279.8	49.4	(200.0)	1,221.2	(080.0)	12(0)	\$373,211
Total Savings (MTCO2e)				(200.0)		(989.9)	1,360.6	
Miscellaneous Energy Conservation		1,373,568 kwh	(89,718 kwh)	273,142 kwh	1,178,212 kwh	(1,012,755 kwh)	786.8	\$215,823
Web Based Energy Competition								
Motors and transformers								
Lighting Project Fixtures (Bulbs and Ballast)	_							
High Temp Hot Water Pipe Replacement	_						ļ	
HVAC, Chiller & Electrical	_					4 500 1 11		
Bulb Replacement (CFLs, LEDs)				1500 bulbs (incl. in Misc.)	1500 bulbs (incl. in Misc.)	1500 bulbs (incl. in Misc.)		
Gas Savings		3,150 GJ/ 875,036 kwh	(307 GJ/ 85,281 kwh)	(993 GJ/ 275,845 kwh)	2,646 GJ/ 735,030 kwh	51 GJ/ 14,167 kwh	577.0	\$158,267
Steam Savings		1,580,910 lbs/ 553,226 kwh	809,300 lbs/ 283,208 kwh	(1,243,440 lbs/ 435,131 kwh)	2,172,140 lbs/ 760,122 kwh	(3,338,950 lbs/ 1,168,437 kwh)	(3.2)	(\$879)
Fuel Oil Savings								
Alternative Energy								
Total Savings (MTCO2e)		3,016.0	7,700.9	15,150.5	14,881.4	17,087.9	57,836.8	\$9,521,832
On-Site Solar (21 MW)		3,800,000 kwh	8,200,000 kwh	19,099,000 kwh	20,901,000 kwh	24,000,000 kwh	54,111.6	\$9,522,800
On-Site Wind		İ	İ			İ	İ	
On-Site Geothermal		1	1			1	1	
On-Site Combined Heat and Power							1	
Purchase of Green Energy/Green Power	1	436,000 kwh	2,616,000 kwh	2,180,000 kwh			3,725.2	(\$968)
Water Conservation/WaterSense								
Total Savings (MTCO2e)		1.5	1.6	1.6	1.6	1.6	7.8	\$6,763
Miscellaneous Water Conservation		İ	İ			Ì	İ	
Low Flow/Hands Free Faucets (64)		ĺ	32,000 gal	32,000 gal	32,000 gal	32,000 gal	0.3	\$260
Low Flow Toilets		İ	İ			İ	İ	
Low Flow Shower Heads		İ	İ			İ	İ	
Low Flow Urinals	Ì	İ	İ			1	İ	
Waterless Urinals (16)		640,000 gal	640,000 gal	640,000 gal	640,000 gal	640,000 gal	7.5	\$6,503
Solid Waste Recycling								
Total Savings (MTCO2e)		191.0	1,848.0	2,448.0	2,142.3	1,415.0	8,044.3	\$113,700
Mixed Recyclables (includes Wastewise)		67.5 tons	653 tons	865 tons	757 tons	500 tons	8,044.3	\$113,700
Pallets Waste Avoided/Wood Recycled		Ì	İ	Ì		1	1	
Steel Recycled during Deconstruction		1	1			1	1	
Concrete Recycled		ĺ	İ	1		1	İ	
Asphalt Recycled		ĺ	1	Ì		1	1	
Ceiling Tiles Recycled		Ì	Ì			1	Ì	
		i	İ	İ		1	İ	
Carpet Recycled								
Carpet Recycled Recycled C & D Waste (Construction Waste)								
Recycled C & D Waste (Construction Waste)								
Recycled C & D Waste (Construction Waste) Cardboard								
Recycled C & D Waste (Construction Waste) Cardboard Mixed Metal (construction/non-construction)								



Environmental Metrics	Mar 2010 MOU	Oct 2010 Update	Sep 2011 Update	Sept 2012 Update	Sept 2013 Update	Sept 2014 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
Can / Bottle Recycling								
Mixed Organics								
Food Donation (Waste diversion)	ļ							
Biosolids & Food Waste Recycling / Composting	ļ							
Fluorescent Bulbs								
Waste Oil Recycled								
Magazines/ThirdClass Mail			ļ					
Newspaper								
Office Paper								
Textbooks								
Phonebooks								
Dimensional Lumber								
Fly Ash								
Aluminum Cans								
Glass								
HDPE								
LDPE	1							
PET	İ							
Appliances	1							
Non-Ferrous Metals	1						İ	
Fats, Oils, Grease			İ	ĺ		İ	İ	
	1		1	1		İ		
Green Procurement								
Total Savings (MTCO2e)				ĺ				
Re-Use/Purchase of Materials with Recycled Content	1						İ	
Purchase / Use of Compost Socks				İ		İ	1	
Purchase of EPEAT Products			ĺ	ĺ		İ	1	
Use of Recycled Steel during Construction								
Use of Recycled Iron during Construction	İ					i		
Use of Recycled Plastic during Construction	İ							
Use of Recycled Aluminum during Construction								
Use of Recycled Concrete / Asphalt dur Construction								
Use of Coal Combustion Products								
	1			1		i	1	
Green Landscaping								
Total Savings (MTCO2e)	1		4.3	949.3	949.3	1,444.8	3,347.6	\$576,957
Green Roofs	1					1		
Porous Pavement				İ		İ	İ	
Grass	1			1		i	1	
Low/no mow area	1					i		
Re-use of Collected Stormwater				1				
On-Site Re-use of Compost / Mulch								
Moisture Sensing Sprinklers								
Number / Acres of Trees								
Reflective Roof				630,000 sq ft	630,000 sq ft	960,341 sq ft	3,330.5	\$562,134
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Synthetic Turf			ļ			ļ		
Native Plants			l			I		L;



Environmental Metrics	Mar 2010 MOU	Oct 2010 Update	Sep 2011 Update	Sept 2012 Update	Sept 2013 Update	Sept 2014 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
Leaves Composted							ļ	
Water Efficient Plants		Yes	1,823,624 gal	1,823,624 gal	1,823,624 gal	1,823,624 gal	17.1	\$14,823
Drip Irrigation System		Yes	Yes	Yes	Yes	Yes		
Replace Inefficient Sprinklers		Yes	Yes	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						ĺ		
Battery Recycling								
Mass Transit								
Total Savings (MTCO2e)								
Miles Avoided								
Transportation					222.0	222.0	116.0	6175 400
Total Savings (MTCO2e)	_				223.0	223.0	446.0	\$175,400
Hybrid Vehicles		ļ	ļ	ļ			ļ	
Electric Vehicles		ļ	ļ				ļ	
Biodiesel Vehicles		ļ	ļ				ļ	
Clean Construction Vehicles								
LNG Vehicles							ļ	
Alternate Fuel Vehicles (Zipcar)		ļ	ļ				ļ	
Gasoline Saved (by hybrid, electric vehicles)					25,000 gal	25,000 gal	446.0	\$175,400
Smartway Transporters								
Bike Racks								
LEED Projects								
Total Savings (MTCO2e)								
Silver - 30%				1	ĺ	İ	1	
Gold - 40%				1		İ	1	
Platinum - 45%								
Misc Further Clarification								
Total Savings (MTCO2e)								
NOX (equipment only)								
NOX (includes vehicles)								
MTCO2 Savir-								
MTCO2e Savings Total (MTCO2e)		4,488.4	9,604.2	18,349.4	19,418.7	19,182.4	71,043.1	\$10,767,863
Energy Conservation/Energy Star	_	4,488.4 1,279.8	9,004. 2 49.4	(200.0)	1,221.2	(989.9)	1,360.6	\$373,211
Alternative Energy		3,016.0	7,700.9	15,150.5	14,881.4	17,087.9	57,836.8	\$9,521,832
Water Conservation/WaterSense		1.5	1.6	1.6	14,881.4	17,087.9	7.8	\$9,521,852
	_					<u> </u>		
Solid Waste Recycling		191.0	1,848.0	2,448.0	2,142.3	1,415.0	8,044.3	\$113,700
Green Landscaping		0.0	4.3	949.3	949.3	1,444.8	3,347.6	\$576,957
Transportation		0.0	0.0	0.0	223.0	223.0	446.0	\$175,400





2014

Hartz Mountain Industries Additional Green MOU Accomplishments and Cost Savings

Energy Star and Related Programs

Hartz has broadened its use of Energy Star's Portfolio Manager to track energy consumption at these buildings:

Hartz Archives Facility, North Bergen, NJ Doubletree Hotel, Jersey City, NJ Hartz Data Recovery Center, Whippany, NJ Sheraton – Harbor Bar Tribeca Grand Hotel, New York, NY 667 Madison Avenue, New York, NY r to track energy consumption at these buildings: Hartz Headquarters, Secaucus, NJ Meadowlands Exposition Center, Secaucus, NJ Sheraton Lincoln Harbor Hotel, Weehawken, NJ Soho Grand Hotel, New York, NY 707 Broad Street, Newark, NJ

LEED Certification

Hartz has now mandated that all new ground-up construction and major renovations performed by the company go through a LEED scorecard analysis. Consistent with this requirement, Hartz expects to receive LEED Silver Certification for the first of three buildings (181 units) at its 589 unit development at Lincoln Harbor in Weehawken, NJ.

White Roofs

Hartz has implemented a program whereby all new warehouse roofs will be energy-saving white roofs. In the past year, Hartz installed a total of 330,341 square feet of white roofs on three buildings in Secaucus, NJ. In addition to these buildings, all other buildings on which Hartz previously installed solar arrays have been retrofitted with white roofs when the roof has been replaced.

Solar Development

Hartz continues to lead the way in utilizing its available roofs for solar energy development. Through August 2014, their ground-mount and rooftop arrays have generated over 76,000 MWh of green power.

Rooftops

Since their last update, Hartz has activated an additional 0.821 MW of solar rooftop arrays, with two arrays totaling 0.87 MW currently under construction. When the newest arrays are commissioned, the total rooftop photovoltaic arrays in Hartz's portfolio will have increased to 12.5 MW. Electricity from these arrays is sold to the building tenants under power purchase agreements.

Ground Mount Development

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. As of August 2014, the Hamilton solar facility had generated over 30,755 MWh of green power.

Co-generation Development

In cooperation with the New York State Energy Research and Development Authority (NYSERDA), Hartz is currently undertaking a feasibility study for a co-generation unit at its Soho Grand Hotel. The gas-fired unit would generate on-site electricity with waste heat captured from steam production for hot water and central heating. If the study proves the project is feasible, construction is expected to be completed in 2015.

Overall Energy Savings

Hartz continues to monitor its carbon footprint, and has received its data for 2013. Hartz has experienced an overall increase in greenhouse gas emissions which it attributes to a) the unusually cold winter last year, and b) increased occupancy rates due to an improving economy.

Recycling Efforts

Pursuant to the MOU, Hartz became a Waste Wise Partner with EPA. Hartz started its recycling efforts focused only on the Harmon Meadow development in Secaucus, but has now expanded its recycling to include almost the entire portfolio, and now includes comingled waste within its recycling stream. In 2014, Hartz expects to recycle more than 500 tons of waste. While this is less than last year, the change is attributed to the recent sales of a number of the properties previously being monitored.

To further reduce its carbon footprint, Hartz retired 50,000 metric tons of carbon offsets in October, 2013. The offsets were Certified Emissions Reductions from the Kyoto Protocol's Clean Development Mechanism. Given Hartz's 2013 GHG emissions of 7,165 metric tons, this action makes Hartz a carbon-neutral organization for a period of roughly 7 years.