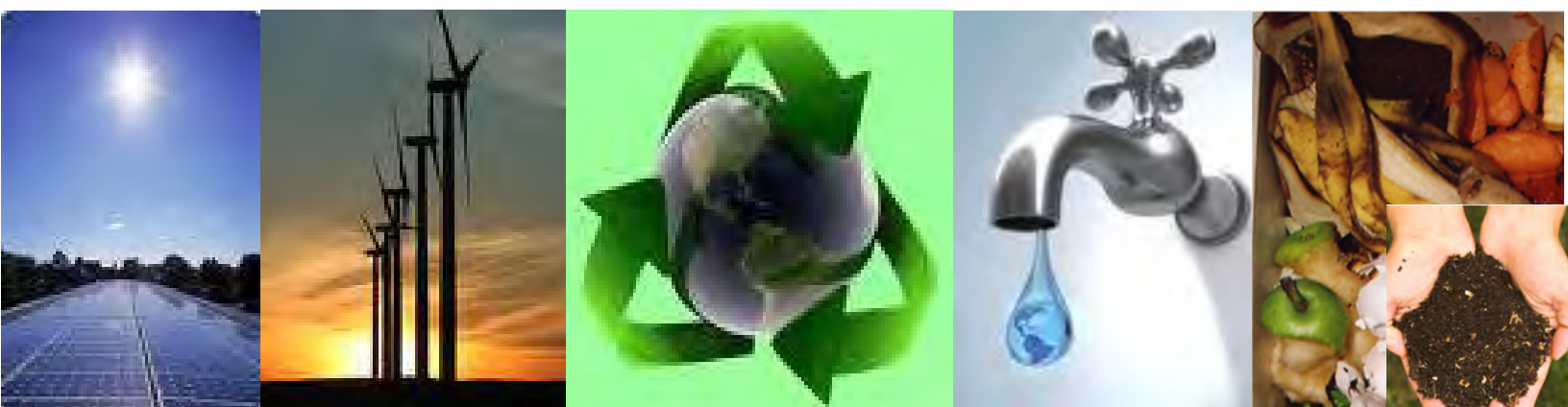




**Hartz Mountain Industries, Inc**  
**Environmental Assessment:**  
**Green MOU Report**  
**October 7, 2011**



**Environmental Protection Agency**  
**Region 2**

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# Accomplishments

Reductions of 12,574 MTCO<sub>2</sub>e



## Memorandum of Understanding

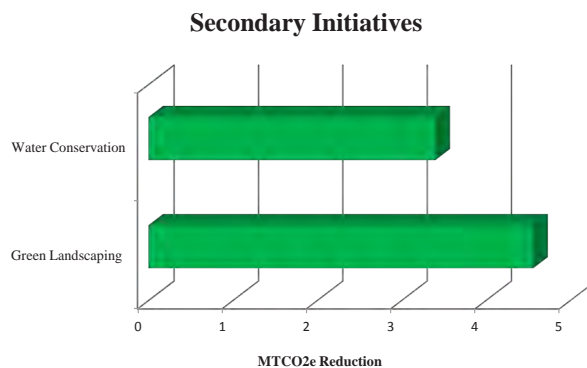
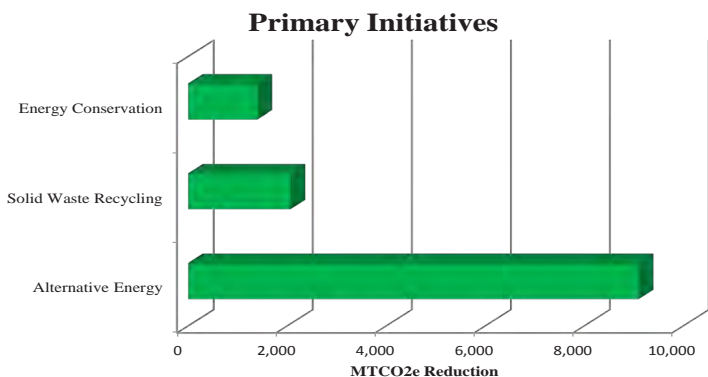
On March 11, 2010, Hartz Mountain Industries signed a Memorandum of Understanding (MOU) pledging to become an environmental steward by implementing a number of green initiatives that would reduce its carbon footprint and further improve our planet's environment. This partnership with the United States 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

Hartz Mountain Industries has provided a six-month status report 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 12,574 MTCO<sub>2</sub>e.

Environmental Metrics	Total Sector (MTCO <sub>2</sub> e)
Energy Conservation	1,398.3
Alternative Energy	9,100.7
Water Conservation	3.4
Solid Waste Recycling	2,067.8
Green Landscaping	4.8
Total (MTCO <sub>2</sub> e)	12,574.7

\*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) which converts standard metrics for electricity, green energy, fuel use, chemical use, water use, and sustainable materials management into MTCO<sub>2</sub>e.

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 MTCO<sub>2</sub>e 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 12,574 MTCO<sub>2</sub>e

### Greenhouse Gas Equivalencies

What does the reduction of 12,574 MTCO<sub>2</sub>e represent ?

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

- Annual greenhouse gas emissions from 2,466 vehicles



- Carbon dioxide emissions from 1,409,720 gallons of gasoline



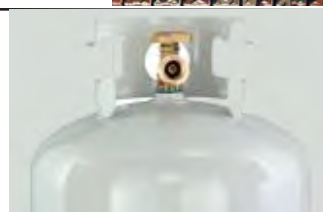
- Carbon dioxide emissions from 29,243 barrels of oil consumed



- Carbon dioxide emissions from the energy use of 1,091 homes for one year



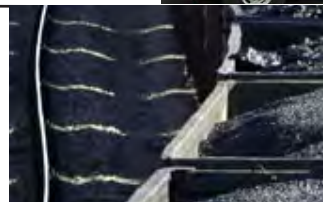
- Carbon dioxide emissions from 523,946 propane tanks used for home barbeques



- Carbon dioxide emissions from gasoline carried by 166 tanker trucks



- Carbon dioxide emissions from burning 68.5 railcars' worth of coal (over a mile long)





Environmental Metrics	Mar 2010 MOU	Oct 2010 Update	Sep 2011 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
<b>Energy Conservation/Energy Star</b>					
<b>Total Savings (MTCO2e)</b>		<b>1,346.3</b>	<b>52.0</b>	<b>1,398.3</b>	<b>\$300,313</b>
Miscellaneous Energy Conservation		1,373,568 kwh	(89,718 kwh)	616.9	\$132,493
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)					
Gas Savings		3,150 GJ (875,000 kwh)	(307 GJ) ((85,280 kwh))	379.5	\$81,499
Steam Savings		1,580,910 lbs (553,230 kwh)	809,300 lbs (283,210 kwh)	401.9	\$86,321
Fuel Oil Savings					
<b>Alternative Energy</b>					
<b>Total Savings (MTCO2e)</b>		<b>2,881.9</b>	<b>6,218.8</b>	<b>9,100.7</b>	<b>\$1,238,400</b>
On-Site Solar (7.4 MW)		3,440,000 kwh	7,400,000 kwh	9,100.7	\$1,238,400
On-Site Wind / Geothermal					
On-Site Combined Heat and Power					
Purchase of Green Energy/Green Power					
<b>Water Conservation/WaterSense</b>					
<b>Total Savings (MTCO2e)</b>		<b>1.6</b>	<b>1.8</b>	<b>3.4</b>	<b>\$2,483</b>
Miscellaneous Water Conservation					
Low Flow / Hands Free Faucets (64)			78,000 gal	0.2	\$143
Low Flow Toilets / Urinals / Shower Heads					
Waterless Urinals (64)		640,000 gal	640,000 gal	3.2	\$2,340
<b>Solid Waste/Industrial Materials Reuse/Green Products</b>					
<b>Total Savings (MTCO2e)</b>		<b>193.7</b>	<b>1,874.1</b>	<b>2,067.8</b>	<b>\$28,820</b>
Mixed Recyclables (includes Wastewise)		67.5 tons	653 tons	2,067.8	\$28,820
Reduction/Green Products					
Re-Use/Purchase of Materials with Recycled Content					
Pallets Waste Avoided/Wood Recycled					
Use of Recycled Steel / Iron during Construction					
Use of Recycled Plastic / Aluminum during Construction					
Use of Recycled Concrete / Asphalt during Construction					
Use of Coal Combustion Products					
Steel Recycled during Deconstruction					
Concrete / Asphalt Recycled					
Ceiling Tiles / 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)					
Can / Bottle Recycling					
Mixed Organics					
Food Donation (Waste diversion)					
Biosolids & Food Waste Recycling / Composting					
Fluorescent Bulbs					
Waste Oil Recycled					
Magazines / Newspaper / ThirdClass Mail					
Office Paper					





2011

## Hartz Mountain Industries Additional Green MOU Accomplishments and Cost Savings

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### **Energy Star and Other Awards:**

In April 2011, the Hartz Mountain Industries received an Energy Star award.

Hartz also received two awards from the New Jersey Chapter of BOMA, The Building Owners and Managers Association, for its efficiency upgrades at 707 Broad Street (Energy Star Award winner in 2010), 15 Exchange Place, Jersey City, 90 Hudson Street, Jersey City, as well as 200 and 400 Plaza Drive in Secaucus.

### **LEED Certification:**

Hartz recently received LEED Silver Certification for the Sheraton Lincoln Harbor Hotel, in Weehawken, New Jersey.

### **Solar Roof Development:**

Within the last year, Hartz has constructed an additional 3.95 MW of solar arrays, bringing the total photovoltaic arrays in Hartz's portfolio to 7.39 MW.

### **Solar Brownfields Development:**

The project to develop a solar array on the former Robert Hawthorne Landfill has been terminated due to the lack of availability of public funds for landfill closure. However, Hartz is developing an 8.5 MW solar array on a former farm and quarry site in Hamilton, New Jersey. The renewable green solar power will be sold to the utility grid.

### **Plumbing Upgrades:**

Hartz installed 64 faucet aerators in our 400 Plaza Drive, Secaucus headquarters. This resulted in a water savings of 77% compared to faucets without aerators.

### **Recycling Efforts:**

During the past year, Hartz has become a WasteWise Partner with EPA.