



Destiny USA
Environmental Assessment:
MOU SemiAnnual Report
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Environmental Protection Agency
Region 2

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Accomplishments

Reductions of 78,287 MTCO₂e



Memorandum of Understanding

On September 25, 2006, Destiny USA 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 Destiny USA has resulted in reducing energy, water and solid waste production across their entire operations.

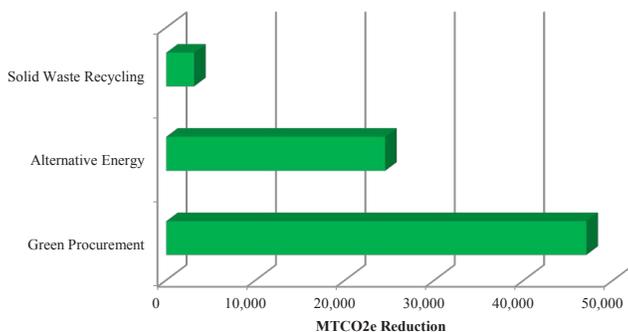
Reduction in Environmental Footprint

This is the second update Destiny USA has provided documenting its green initiatives. The EPA has analyzed the submitted information and generated an environmental footprint. Due to the progressive green efforts of the organization, Destiny USA has managed to reduce its carbon footprint by 78,287 MTCO₂e* and saved an estimated \$1,500,000 in operating expenses.

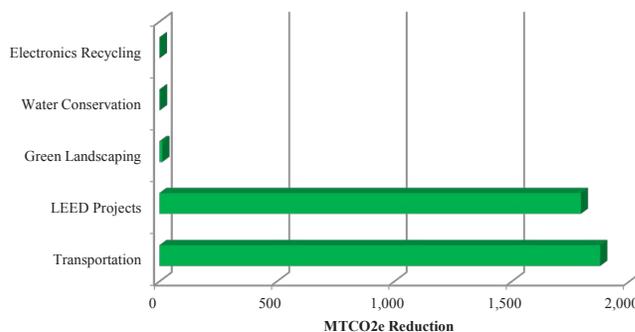
*Metric Ton Carbon Dioxide Equivalent

Environmental Metrics	Total Sector (MTCO ₂ e)
Green Procurement	47,000.0
Alternative Energy	24,486.9
Solid Waste Recycling	3,111.4
Transportation	1,876.8
LEED Projects	1,794.7
Green Landscaping	12.4
Water Conservation	3.0
Electronics Recycling	2.3
Total (MTCO₂e)	78,287.6

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 that 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 78,287 MTCO₂e

Greenhouse Gas Equivalencies

What does the reduction of 78,287 MTCO₂e represent ?
The organization's effort is equivalent to any one of the following:

- Annual greenhouse gas emissions from 15,351 vehicles



- Carbon dioxide emissions from 8,776,637 gallons of gasoline



- Carbon dioxide emissions from 182,064 barrels of oil consumed



- Carbon dioxide emissions from the energy use of 6,778 homes for one year



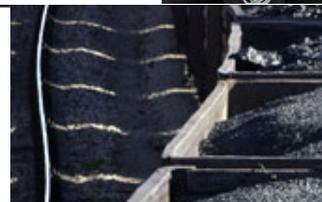
- Carbon dioxide emissions from 3,261,983 propane tanks used for home barbeques



- Carbon dioxide emissions from gasoline carried by 1,033 tanker trucks



- Carbon dioxide emissions from burning 426 railcars' worth of coal (nearly 6 1/2 miles long)





Environmental Metrics	Sep 2006 MOU	Dec 2010 Update	Dec 2011 Update	Jul 2012 Update	Total Conversion (MTCO2e)	Cost Savings (est.)
Energy Conservation/Energy Star						
Total Savings (MTCO2e)					0.0	\$0
Miscellaneous Energy Conservation				included in LEED savings		
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)						
Bulb Replacement (LEDs)						
Gas Savings						
Fuel Oil Savings						
Steam Savings						
Alternative Energy						
Total Savings (MTCO2e)			16,324.6	8,162.3	24,486.9	(\$807,300)
On-Site Solar						
On-Site Wind						
On-Site Geothermal						
On-Site Combined Heat and Power						
Purchase of Green Energy/Green Power			26,000,000 kwh	13,000,000 kwh	24,486.9	(\$807,300)
Water Conservation/WaterSense						
Total Savings (MTCO2e)				3.0	3.0	\$653
Miscellaneous Water Conservation						
Low Flow/Hands Free Faucets (131)				65,500 gal	0.1	\$124
Low Flow Toilets (104) - included in Stormwater savings						
Low Flow Shower Heads (15)				34,500 gal + 4500 kwh	2.9	\$529
Low Flow Urinals (29) - included in Stormwater savings						
Waterless Urinals						
Solid Waste Recycling						
Total Savings (MTCO2e)		0.4	2,079.3	1,031.7	3,111.4	\$114,819
Mixed Recyclables (includes Wastewise)						
Pallets Waste Avoided / Wood Recycled				1.8 tons	4.4	\$72
Steel Recycled Offsite during Deconstruction				42.18 tons	75.9	\$1,687
Concrete / Asphalt Recycled during Deconstruction						
Drywall				143.53 tons	31.6	\$5,741
Recycled C&D Waste (construction waste)				114 tons	28.3	\$4,560
Cardboard (construction/non-construction/sharp containers)			283.7 tons	115.35 tons	1,237.1	\$15,962
Mixed Metal (construction/non-construction)						
Paper, Mixed			283.7 tons	82.65 tons	1,285.9	\$14,654
Plastic, Mixed (bottles,construction/non-construction,sharp containers)						
Can / Bottle Recycling			2.63 tons	3.45 tons	45.9	\$243
Mixed Organics						
Food Donation (Waste diversion)						
Biosolids and Food Waste Recycling / Composting				1 ton	0.2	\$40



Environmental Metrics	Sep 2006 MOU	Dec 2010 Update	Dec 2011 Update	Jul 2012 Update	Total Conversion (MTCO2e)	Cost Savings (est.)
Food Waste Combusted			1383.7 tons	341 tons	224.2	\$68,988
Fluorescent Bulbs		3491.35 lbs	1655.92 lbs	552.3 lbs	0.4	\$114
Ballast (mixed metal)		58 lbs	48 lbs	159 lbs	0.7	\$5
Ceiling Tiles Recycled						
Carpet Recycled						
Waste Oil Recycled			335 gal	4504 gal	58.1	\$823
Magazines / Third Class Mail						
Newspapers						
Office Paper						
Phonebooks						
Textbooks						
Dimensional Lumber				48.26 tons	118.7	\$1,930
Fly Ash						
Aluminum Cans						
Glass						
HDPE						
LDPE						
PET						
Appliances						
Non-Ferrous Metals						
Fats, Oils, Grease						
Green Procurement						
Total Savings (MTCO2e)		47,000.0			47,000.0	\$1,144,000
Purchase of Materials with Recycled Content						
Purchase / Use of Compost Socks						
Purchase of EPEAT Products						
Use of Recycled Steel during Construction		23,000 tons			41,400.0	\$920,000
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		7,000 tons			5,600.0	\$224,000
Green Landscaping						
Total Savings (MTCO2e)			8.3	4.1	12.4	\$11,389
Green Roofs						
Porous Pavement						
Grass						
Low / No Mow Area						
Green Space						
Re-use of Collected Stormwater			4,000,000 gal	2,000,000 gal	12.4	\$11,389
On-Site Use of Compost / Mulch						
Moisture Sensing Sprinklers						
Number / Acres of Trees						
Reflective Roof (White Mule Hide TPO)				included in LEED savings		
Synthetic Turf						



Environmental Metrics	Sep 2006 MOU	Dec 2010 Update	Dec 2011 Update	Jul 2012 Update	Total Conversion (MTCO2e)	Cost Savings (est.)
Native Plants						
Leaves Composted						
Electronics/EPEAT						
Total Savings (MTCO2e)		1.1	1.0	0.2	2.3	\$58
Recycling of Electronics		1383 lbs	1195 lbs	265 lbs	2.3	\$57
Re-Use/Donation of Used Computers						
Toner/Ink Recycling and Use of Recycled Ink						
Battery Recycling		30 lbs			0.0	\$1
Mass Transit						
Total Savings (MTCO2e)						
Miles Avoided						
Transportation						
Total Savings (MTCO2e)			1,876.8		1,876.8	\$750,720
Hybrid Vehicles						
Electric Vehicles						
Biodiesel Vehicles						
Clean Construction Vehicles (bio-diesel)			276,000 gal		1,876.8	\$750,720
LNG Vehicles						
Alternate Fuel Vehicles (Zipcar)						
Smartway Transporters						
Bike Racks						
LEED Projects						
Total Savings (MTCO2e)				1,794.7	1,794.7	\$294,989
Silver - 10% energy reduction						
Gold - 17% energy reduction (1,350,000 sq ft)				2,858,422.5 kwh	1,794.7	\$294,989
Platinum - 20% energy reduction						
Misc. - Further Clarification						
Total Savings (MTCO2e)						
NOX (equipment only)						
NOX (includes vehicles)						
MTCO2e Savings						
Total (MTCO2e)	0.0	47,001.5	20,289.9	10,996.1	78,287.6	\$1,509,328
Energy	0.0	0.0	0.0	0.0	0.0	\$0
Alternative Energy	0.0	0.0	16,324.6	8,162.3	24,486.9	(\$807,300)
Water	0.0	0.0	0.0	3.0	3.0	\$653
Solid Waste	0.0	0.4	2,079.3	1,031.7	3,111.4	\$114,819
Green Procurement	0.0	47,000.0	0.0	0.0	47,000.0	\$1,144,000
Green Landscaping	0.0	0.0	8.3	4.1	12.4	\$11,389
Electronics	0.0	1.1	1.0	0.2	2.3	\$58
Transportation	0.0	0.0	1,876.8	0.0	1,876.8	\$750,720
LEED Projects	0.0	0.0	0.0	1,794.7	1,794.7	\$294,989



2012

Destiny USA Additional Green MOU Accomplishments

LEED Gold Designation

Destiny USA was officially awarded LEED Gold certification in February 2012. There are presently 43 tenants registered into the LEED certification program and 2 that have been awarded their certification.

On July 30th, Destiny USA will be presented with the LEED plaque for the venue.

Food Waste

Destiny/Carousel pre-consumer food waste is being sent to a composting site. The food waste is mixed with yard waste and other organics to make nutrient rich soil to be sold.

So far just over a ton has been taken to this location but Destiny is expecting this number to climb to between 100-200 tons annually.

The post-consumer food waste is being incinerated for energy recovery.

Destiny Expansion Opening

The first-level section of the three-level expansion of Carousel Center mall named The Canyon opened in early July 2012. The second two levels will open in the coming weeks.

The entire Carousel Center mall, including the 21-year-old retail-and-restaurant main building, will be renamed Destiny USA, with a grand re-opening scheduled for August 2012.

Destiny USA looks forward to examining other initiatives that can be implemented and will continue to integrate environmentally friendly components when and where the opportunity presents itself.