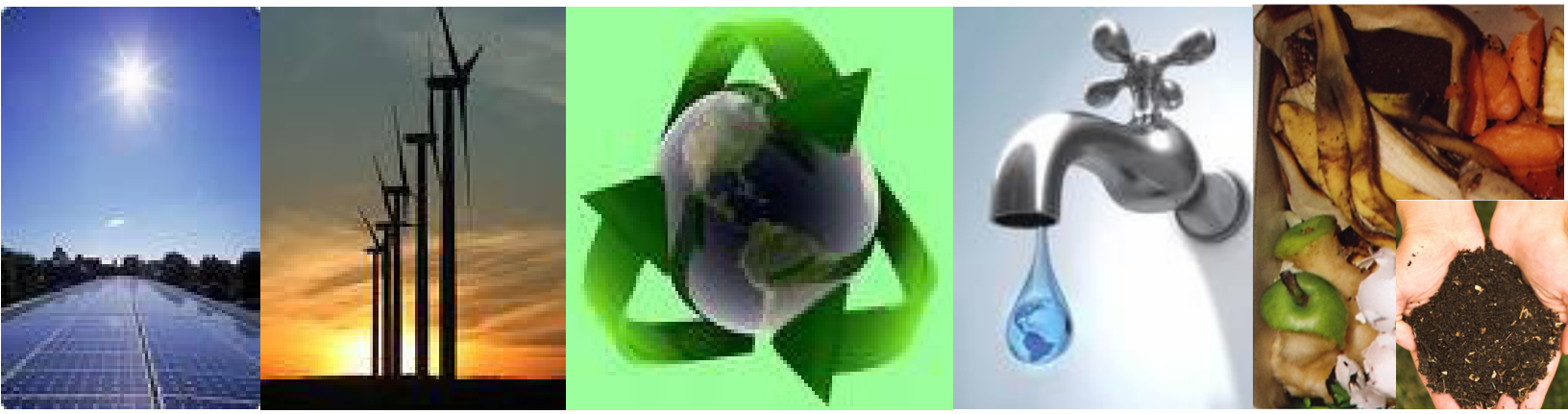
MetLife Stadium
(formerly New Meadowlands Stadium)
Environmental Assessment:
MOU Annual Report
March 20, 2014



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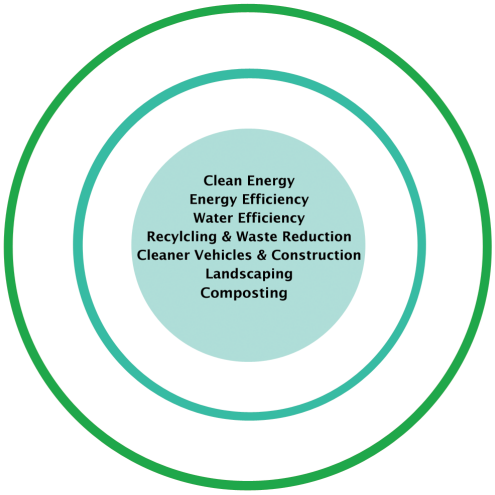
Accomplishments

Reductions of 238,325 MTCO2e



Memorandum of Understanding

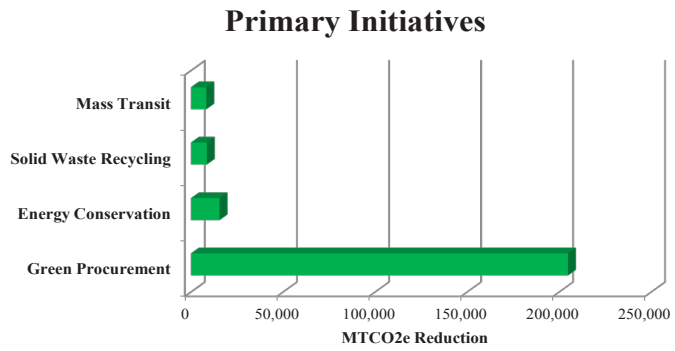
On June 1, 2009, MetLife Stadium, home of the New York Giants and New York Jets, signed a Memorandum of Understanding (MOU) pledging to become an environmental steward by implementing a number of green initiatives that would reduce its carbon footprint and further improve our planet's environment. This partnership with the United States Environmental Protection Agency (EPA) and MetLife Stadium has resulted in reducing energy, water and solid waste production across their entire operations.

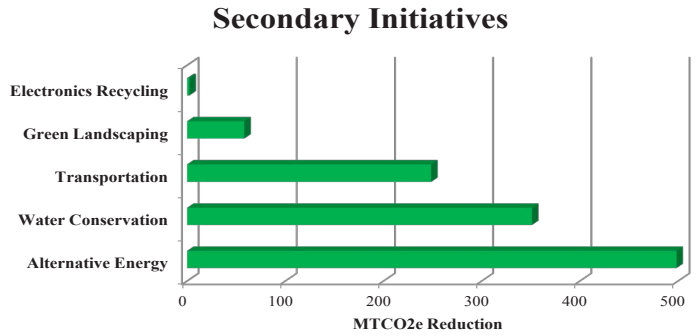
Reduction in Environmental Footprint

In the last four years, the MetLife Stadium has provided seven updates documenting its green initiatives. The EPA has analyzed the submitted information and generated an environmental footprint for the organization. Due to their progressive green efforts, the organization has managed to reduce its carbon footprint by 238,325 MTCO2e* and saved an estimated $22.4 million in operating expenses.

*Metric Ton Carbon Dioxide Equivalent

Environmental Metrics	Total Sector (MTCO2e)	Cost Savings (Est.)
Energy Conservation	15,474.1	$2,795,201
Alternative Energy	498.4	$87,710
Water Conservation	351.2	$247,245
Solid Waste Recycling	8,582.9	$573,426
Green Procurement	204,812.5	$8,272,940
Green Landscaping	58.3	$50,396
Electronics Recycling	2.4	$60
Mass Transit	8,297.3	$10,325,081
Transportation	248.5	$140,000
Total (MTCO2e)	238,325.6	$22,492,059





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.

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 238,325 MTCO2e

Greenhouse Gas Equivalencies

What does the reduction of 238,325 MTCO2e represent ?
The organization's effort is equivalent to any one of the following:

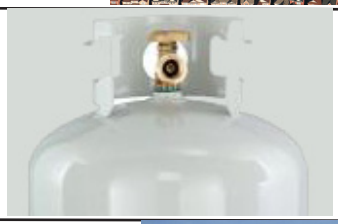
- Annual greenhouse gas emissions from 50,174 vehicles

- Carbon dioxide emissions from 26,817,329 gallons of gasoline

- Carbon dioxide emissions from 554,246 barrels of oil consumed

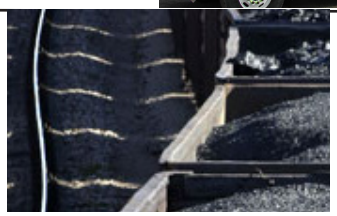
- Carbon dioxide emissions from the energy use of 21,745 homes for one year

- Carbon dioxide emissions from 9,930,233 propane tanks used for home barbeques



- Carbon dioxide emissions from gasoline carried by 3,155 tanker trucks

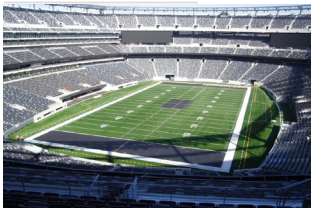
- Carbon dioxide emissions from burning 1,278 railcars' worth of coal (over 19 1/3 miles long)



Environmental Metrics	Jun 2009 MOU	Dec 2009 Update	Jun 2010 Update	Nov 2010 Update	Jun 2011 Update	Feb 2012 Update	Feb 2013 Update	Feb 2014 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
Energy Conservation										
Total Savings (MTCO2e)		***206.4***	***206.4***	***109.4***	***1,780.0***	***3,204.0***	***4,984.0***	***4,984.0***	***15,474.1***	***$2,795,201***
Misc. Energy Conservation		139,370 kwh	139,370 kwh	3,033 kwh	2,500,000 kwh	4,500,000 kwh	7,000,000 kwh	7,000,000 kwh	15,152.5	$2,666,606
Motors and Transformers										
Lighting Project Fixtures										
High Temp Hot Water Pipe Replacement										
HVAC, Chiller & Electrical										
Bulb Replacement (CFLs)										
Bulb Replacement (LEDs)										
Gas Savings										
Oil Savings		10,424 gal	10,424 gal	10,425 gal					321.6	$128,595
Steam Savings										
Alternative Energy										
Total Savings (MTCO2e)							***249.2***	***249.2***	***498.4***	***$87,710***
On-Site Solar							350,000 kwh	350,000 kwh	498.4	$87,710
On-Site Wind										
On-Site Geothermal										
On-Site Combined Heat and Power										
Purchase of Green Energy/ Green Power										
Water Conservation										
Total Savings (MTCO2e)		***0.4***	***44.1***	***44.1***	***43.8***	***43.8***	***87.5***	***87.5***	***351.2***	***$247,245***
Misc. Water Conservation		158,632 gal	158,632 gal	158,632 gal					1.1	$967
Low Flow/Hands Free Faucets (956)			239,000 gal	239,000 gal	239,000 gal	239,000 gal	478,000 gal	478,000 gal	4.5	$3,885
Low Flow Toilets (956)			1,912,000 gal	1,912,000 gal	1,912,000 gal	1912,000 gal	3,824,000 gal	3,824,000 gal	35.9	$31,083
Low Flow Shower Heads (96)			110,400 gal + 14,400 kwh	110,400 gal + 14,400 kwh	110,400 gal + 14,400 kwh	110,400 gal + 14,400 kwh	220,800 gal + 28,800 kwh	220,800 gal + 28,800 kwh	84.1	$16,230
Low Flow Urinals										
Waterless Urinals (600)			12,000,000 gal	12,000,000 gal	12,000,000 gal	12,000,000 gal	24,000,000 gal	24,000,000 gal	225.6	$195,080
Solid Waste Recycling										
Total Savings (MTCO2e)	***983.6***	***1,103.5***	***1,564.9***	***498.5***	***503.0***	***796.4***	***1,485.0***	***1,648.1***	***8,582.9***	***$573,426***
Mixed Recyclables (includes Wastewise)			40 tons	69.5 tons	69.5 tons	123.54 tons	325.29 tons	331.61 tons	2,686.4	$38,378
Pallets / Wood Recycled			30 tons	25.5 tons	25.5 tons	32.19 tons	47.47 tons	46.89 tons	510.6	$8,302
Steel Recycled										
Concrete/Asphalt Recycled							3.44 tons	1.18 tons	2.4	$185
Drywall Recycled / Reused							6.61 tons	1.69 tons	1.8	$332
Recycled C & D Waste	3,966 tons	3,967 tons	3,967 tons			23.58 tons			2,957.1	$476,943
Cardboard			78 tons	58 tons	58 tons	58.72 tons	71.36 tons	83.98 tons	1,269.1	$16,322
Mixed Mettals				7 tons	7 tons	14.26 tons	27.72 tons	19.33 tons	299.0	$3,012
Paper, Mixed		34 tons	34 tons	7.5 tons	7.5 tons	18.77 tons	13.28 tons	25.18 tons	493.6	$5,609
Plastic, Mixed						4.33 tons	4.07 tons	24.49 tons	32.2	$1,316
Blue Wrap										
Mixed Organics										

Environmental Metrics	Jun 2009 MOU	Dec 2009 Update	Jun 2010 Update	Nov 2010 Update	Jun 2011 Update	Feb 2012 Update	Feb 2013 Update	Feb 2014 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
Food Donation				3 tons	5.5 tons	4.2 tons	5.37 tons	5.5 tons	4.7	$943
Biosolids & Food Waste Recycling / Compost					20 tons	106.65 tons	153.15 tons	195.31 tons	95.0	$19,004
Fluorescent Bulbs										
Ceiling Tiles Recycled										
Carpet Recycled										
Waste Oil Recycled			11 tons	2 tons	2 tons	11.25 tons	13.25 tons	37.5 tons	231.0	$3,080
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 (MTCO2e)	***193,908.7***	***1,031.9***	***5,224.1***	***4,579.9***	***0.8***		***31.3***	***35.7***	***204,812.5***	***$8,272,940***
Re-Use/Purchase of Materials with Recycled Content	16,000 tons steel pilings			160,000 sq ft wood 3,000,000 sf wallboard 250,000 sf ceiling tile	2.5 tons 30% PC paper		28.2 tons 100% PC paper	32.16 tons 100% PC paper	30,808.1	$781,000
Use of Compost Socks										
Purchase of EPEAT Products										
Use of Recycled Steel	60,000 tons								108,000.0	$2,400,000
Use of Recycled Iron	560 tons								2,223.2	$22,400
Use of Recycled Plastic	51 tons								50.0	$2,040
Use of Recycled Aluminum	40 tons								355.6	$1,600
Use of Recycled Concrete / Asphalt	102,000 tons		8,000 tons	200 tons + 215,000 cu ft					60,279.7	$4,601,500
Coal Combustion Products	5,733 cu yd	5,733 cu yd	5,734 cu yd						3,096.0	$464,400
Green Landscaping										
Total Savings (MTCO2e)			***7.3***	***7.3***	***7.3***	***7.3***	***14.6***	***14.6***	***58.3***	***$50,396***
Green Roofs										
Porous Pavement			1,000,000 gal	1,000,000 gal	1,000,000 gal	1,000,000 gal	2,000,000 gal	2,000,000 gal	18.8	$16,257
Grass / Green Space										
Low / no mow area										
Use of Collected Stormwater										
Re-use of Compost / Mulch										
Moisture Sensing Sprinklers										
Number / Acres of Trees										
Reflective Roof										
Synthetic Turf			1,750,000 gal	1,750,000 gal	1,750,000 gal	1,750,000 gal	3,500,000 gal	3,500,000 gal	32.9	$28,449

Environmental Metrics	Jun 2009 MOU	Dec 2009 Update	Jun 2010 Update	Nov 2010 Update	Jun 2011 Update	Feb 2012 Update	Feb 2013 Update	Feb 2014 Update	Total Conversion (MTCO2e)	Cost Savings (Est.)
Native Plants			350,000 gal	350,000 gal	350,000 gal	350,000 gal	700,000 gal	700,000 gal	6.6	$5,690
Leaves Composted										
Electronics/EPEAT										
Total Savings (MTCO2e)				***1.0***				***1.4***	***2.4***	***$60***
Recycling of Electronics				0.625 tons				0.865 tons	2.4	$60
Donation of Used Computers										
Toner/Ink Recycling										
Battery Recycling										
Purchase of EPEAT Products										
Mass Transit										
Total Savings (MTCO2e)			***1,349.2***	***1,349.2***	***1,349.2***	***1,416.6***	***1,416.6***	***1,416.6***	***8,297.3***	***$10,325,081***
Vehicles Miles Avoided			3,025,000 mi.	3,025,000 mi.	3,025,000 mi.	3,176,250 mi.	3,176,250 mi.	3,176,250 mi.	8,297.3	$10,325,081
Transportation										
Total Savings (MTCO2e)			***1.7***		***44.3***	***50.6***	***76.0***	***76.0***	***248.5***	***$140,000***
Hybrid / Electric Vehicles					32 vehicles	32 vehicles	32 vehicles	32 vehicles	246.8	$140,000
Biodiesel Vehicles										
Clean Construction Vehicles			1.68 MTCO2e						1.7	
LNG Vehicles										
Alternate Fuel Vehicles										
Smartway Transporters										
Bike Racks										
LEED Projects										
Total Savings (MTCO2e)										
Silver - 10%										
Gold - 17%										
Platinum -20%										
MTCO2e Savings										
Total (MTCO2e)	194,892.3	2,342.2	8,397.7	6,589.3	3,728.3	5,518.7	8,344.1	8,513.0	238,325.6	$22,492,059
Energy	0.0	206.4	206.4	109.4	1,780.0	3,204.0	4,984.0	4,984.0	15,474.1	$2,795,201
Alternative Energy	0.0	0.0	0.0	0.0	0.0	0.0	249.2	249.2	498.4	$87,710
Water	0.0	0.4	44.1	44.1	43.8	43.8	87.5	87.5	351.2	$247,245
Solid Waste	983.6	1,103.5	1,564.9	498.5	503.0	796.4	1,485.0	1,648.1	8,582.9	$573,426
Green Procurement	193,908.7	1,031.9	5,224.1	4,579.9	0.8	0.0	31.3	35.7	204,812.5	$8,272,940
Green Landscaping	0.0	0.0	7.3	7.3	7.3	7.3	14.6	14.6	58.3	$50,396
Electronics	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.4	2.4	$60
Mass Transit	0.0	0.0	1,349.2	1,349.2	1,349.2	1,416.6	1,416.6	1,416.6	8,297.3	$10,325,081
Transportation	0.0	0.0	1.7	0.0	44.3	50.6	76.0	76.0	248.5	$140,000



2014

MetLife Stadium
(formerly New Meadowlands Stadium)
Additional Green MOU Accomplishments and Cost Savings

OPERATIONS PHASE SUSTAINABILITY GOALS & ACCOMPLISHMENTS

Since their last report in February 2013, MetLife Stadium has made significant strides in conserving energy, alternative energy sources, and recycling. The Solar Ring, installed in 2012, continues to generate a portion of their power needs on a non-event day. They will continue to look at potential future solar installations at the stadium and site.
In the area of recycling, MetLife exceeded its goals for recycling, including the continuation of the parking lot recycling (tailgating) program during the 2013 football season, which resulted in an increase in stadium recycling from 33% in 2012 to 50% in 2013.

Energy Conservation Initiatives

The following new procedures and practices were implemented in 2013 to support MetLife's energy conservation efforts, which will result in an overall energy savings for 2014:
Encellium Lighting Control System: Retrofitted 389 fixtures from metal halide to LED, which is projected to reduce energy consumption by 87%.
Rewired escalator LED step lights and put on a time control system.
Use of LED lights on emergency lighting which use far less energy.

Recycling and Solid Waste

As part of their operating principles, MetLife Stadium has developed a Recycling Program Plan for event days, office procedures and employee programs. As a goal, they sought initially to reduce solid waste production by 25% through recycling programs. This compares to a recycling level in the former Giants Stadium, operated by a different party, of less than 10% of all solid waste.

In 2013, MetLife diverted 50.38% of materials from the waste stream through:
Established recycling areas in the parking areas with blue bins for recycling; gray bins for trash - MetLife Stadium has changed the bins in the parking areas to differentiate among the types of material recycled (plastics, glass, aluminum).
Installation of recycling bins close to trash bins in the stadium for patrons (sorted by type – e.g., cardboard, mixed paper, plastic, and aluminum).
MetLife Stadium has bins in place that sort according to waste streams and continues to recycle comingled waste with its partner, Waste Management.
Implementation of a parking lot recycling program, which encourages fans participation.

MetLife Stadium has increased parking lot recycling collection to 188 tons – up from 152 in 2012.
Program has helped to contribute to the over 330 tons of comingled waste being recycled throughout the Sports Complex.
In 2013, MetLife increased its compost collection to include all kitchen pantries, which resulted in 195 tons collected – up from 153 tons in 2012.
Lowered trash collection to 718 tons – down from 775 tons in 2012.
Separation and bailing of all corrugated paper products/cardboard on site, both in stadium concourses and on service level, continues with great result.
Recycling or provide for salvaging to others all wood pallets and small, off season construction project materials.

Office Management and Administration

MetLife Stadium continues to build upon the established series of programs and protocols in the Stadium offices in support of sustainable development:
Purchase of Energy Star office equipment (cordless telephones, computers, monitors, printers, faxes, copiers, scanners, water coolers).
Purchase of compact fluorescent bulbs or high efficiency tube fluorescents for all fixtures throughout the stadium.
Purchase alternative fuel vehicles for onsite use (gators, carts, etc).
Assess purchase of green electronic products, as practical.
Use of 30% post consumer recycled paper supply in office and for NMS publications.
Use of 100% recycled soft tissue products.
Conserve hard copy print run requirements and develop other strategies to reduce use of paper.
Install automatic hand dryers in locker rooms and continue to assess their use in other areas
Use of green products for cleaning purposes (floor wax, carpet shampoo, window cleaning, etc.).
RFP for cleaning services at the stadium required the use of environmentally friendly cleaning products.
Develop green procurement standard specifications for maintenance-related RFPs.

In 2013, stadium employees participated in the second annual Earth Day program. Involvement included Site Cleaning – Cleaning crews were dispatched along the roadways surrounding the MetLife Stadium Sports Complex, collecting nearly TWO TONS of materials.