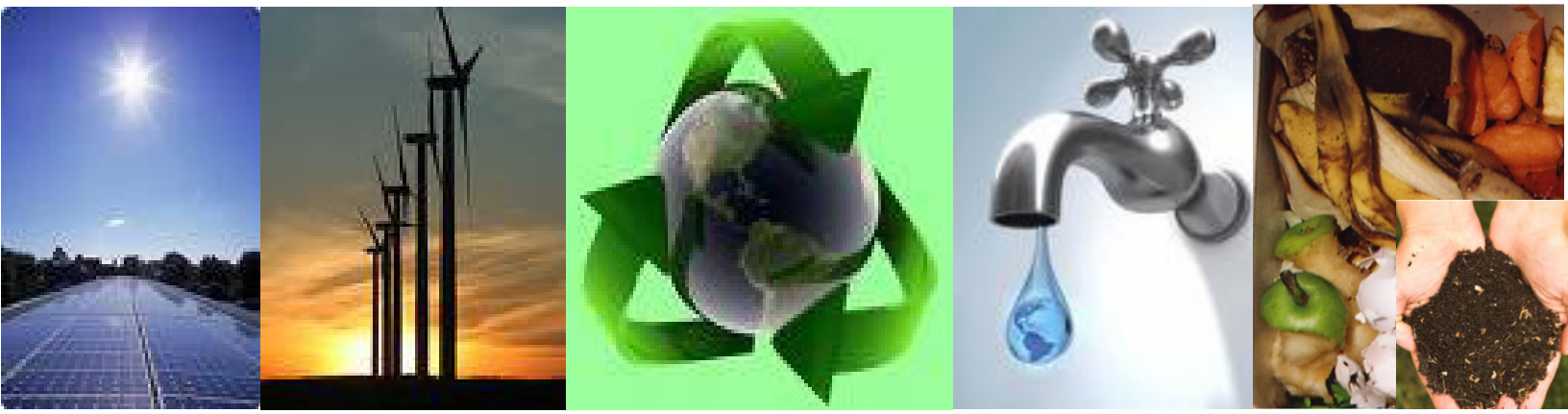
MetLife Stadium
(formerly New Meadowlands Stadium)
Environmental Assessment:
MOU Annual Report
May 13, 2015



Environmental Protection Agency
Region 2

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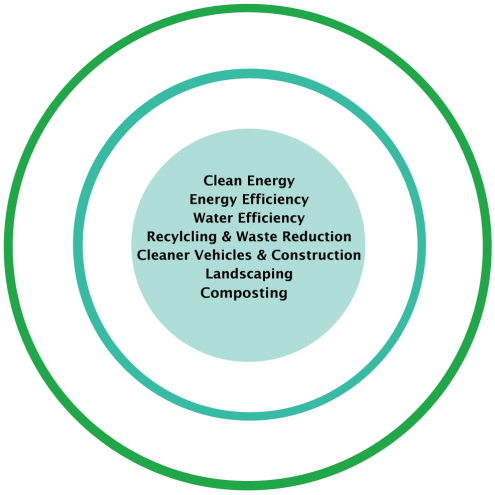
Accomplishments

Reductions of 247,379 MTCO2e



Memorandum of Understanding

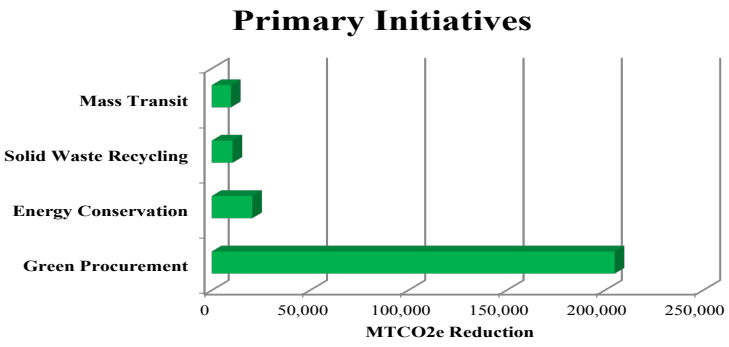
On June 1, 2009, MetLife Stadium, home of the New York Giants and New York Jets, signed a Memorandum of Understanding (MOU) pledging to become an environmental steward by implementing a number of green initiatives that would reduce its carbon footprint and further improve our planet's environment. This 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.

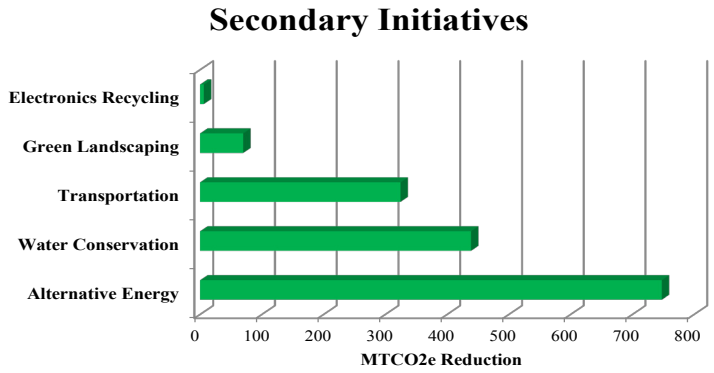
Reduction in Environmental Footprint

In the last five years, the MetLife Stadium has provided nine 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 247,379 MTCO2e* and saved an estimated $23.5 million in operating expenses.

*Metric Ton Carbon Dioxide Equivalent

Environmental Metrics	Total Sector (MTCO2e)	Cost Savings (Est.)
Energy Conservation	20,607.6	$3,698,614
Alternative Energy	747.6	$131,565
Water Conservation	438.7	$308,813
Solid Waste Recycling	10,526.9	$611,847
Green Procurement	204,944.2	$8,272,940
Green Landscaping	69.8	$60,335
Electronics Recycling	6.1	$153
Mass Transit	9713.9	$10,325,081
Transportation	324.5	$140,000
Total (MTCO2e)	247,379.4	$23,549,348





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 247,379 MTCO2e

Greenhouse Gas Equivalencies

What does the reduction of 247,379 MTCO2e represent ?
The organization's effort is equivalent to any one of the following:

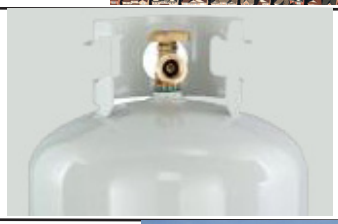
- Annual greenhouse gas emissions from 52,080 vehicles

- Carbon dioxide emissions from 27,836,053 gallons of gasoline

- Carbon dioxide emissions from 575,300 barrels of oil consumed

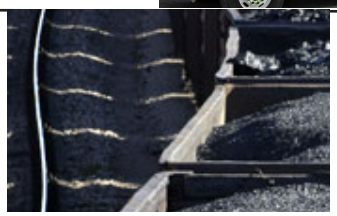
- Carbon dioxide emissions from the energy use of 22,571 homes for one year

- Carbon dioxide emissions from 10,307,458 propane tanks used for home barbeques



- Carbon dioxide emissions from gasoline carried by 3,275 tanker trucks

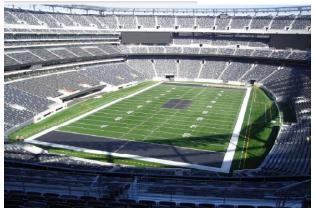
- Carbon dioxide emissions from burning 1,326 railcars' worth of coal (over 20 miles long)



Environmental Metrics	Jun '09 MOU	Dec '09 Update	Jun '10 Update	Nov '10 Update	Jun '11 Update	Feb '12 Update	Feb '13 Update	Feb '14 Update	Mar '15 Update	Total 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***	***5,133.5***	***20,607.6***	***$3,698,614***
Miscellaneous 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	7,210,000 kwh	20,286.0	$3,570,019
Oil Savings		10,424 gal	10,424 gal	10,425 gal						321.6	$128,595
Alternative Energy											
Total Savings (MTCO2e)							***249.2***	***249.2***	***249.2***	***747.6***	***$131,565***
On-Site Solar							350,000 kwh	350,000 kwh	350,000 kwh	747.6	$131,565
Water Conservation/WaterSense											
Total Savings (MTCO2e)		***0.4***	***44.1***	***44.1***	***43.8***	***43.8***	***87.5***	***87.5***	***87.5***	***438.7***	***$308,813***
Miscellaneous 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	478,000 gal	5.6	$4,857
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	3,824,000 gal	44.9	$38,853
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	220,800 gal + 28,800 kwh	105.1	$20,286
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	24,000,000 gal	281.9	$243,850
Solid Waste Recycling											
Total Savings (MTCO2e)	***983.6***	***1,105.9***	***1,569.2***	***504.4***	***507.8***	***802.5***	***1,500.0***	***1,659.7***	***1893.8***	***10,526.9***	***$611,847***
Mixed Recyclables (includes Wastewise)			40 tons	69.5 tons	69.5 tons	123.54 tons	325.29 tons	331.61 tons	298.23 tons	3,521.5	$50,307
Pallets Waste Avoided/Wood Recycled			30 tons	25.5 tons	25.5 tons	32.19 tons	47.47 tons	46.89 tons	64.54 tons	669.3	$10,884
Concrete/Asphalt Recycled							3.44 tons	1.18 tons	12.33 tons	8.9	$678
Drywall Recycled / Reused							6.61 tons	1.69 tons	1.69 tons	2.2	$400
Recycled C & D Waste (Construction Waste)	3,966 tons	3,967 tons	3,967 tons			23.58 tons				2,957.0	$476,943
Cardboard (construction/non-construction/sharp containers)			78 tons	58 tons	58 tons	58.72 tons	71.36 tons	83.98 tons	92.18 tons	1,736.1	$22,330
Mixed Metal (construction/non-construction)				7 tons	7 tons	14.26 tons	27.72 tons	19.33 tons	15.91 tons	362.1	$3,649
Paper, Mixed		34 tons	34 tons	7.5 tons	7.5 tons	18.77 tons	13.28 tons	25.18 tons	53.62 tons	682.4	$7,754
Plastic, Mixed (bottles, construction/non-construction, sharp containers)						4.33 tons	4.07 tons	24.49 tons	59.75 tons	90.8	$3,706
Food Donation (Waste diversion)				3 tons	5.5 tons	4.2 tons	5.37 tons	5.5 tons	5.5 tons	5.8	$1,163
Biosolids & Food Waste Recycling / Composting					20 tons	106.65 tons	153.15 tons	195.31 tons	261.26 tons	147.3	$29,455
Waste Oil Recycled			11 tons	2 tons	2 tons	11.25 tons	13.25 tons	37.5 tons	37.5 tons	343.5	$4,580

Environmental Metrics	Jun '09 MOU	Dec '09 Update	Jun '10 Update	Nov '10 Update	Jun '11 Update	Feb '12 Update	Feb '13 Update	Feb '14 Update	Mar '15 Update	Total MTCO2e	Cost Savings (Est.)
Green Procurement											
Total Savings (MTCO2e)	***194,909.7***	***1,031.9***	***5,224.1***	***4,310.7***	***0.8***		***31.3***	***35.7***	***0.0***	***204,944.2***	***$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 wall-board 250,000 sf ceiling tile	2.5 tons 30% PC paper		28.2 tons 100% PC paper	32.16 tons 100% PC paper		30,698.8	$781,000
Use of Recycled Steel during Construction	60,000 tons									108,000.0	$2,400,000
Use of Recycled Iron during Construction	560 tons									2,452.8	$22,400
Use of Recycled Plastic during Construction	51 tons									52.5	$2,040
Use of Recycled Aluminum during Construction	40 tons									364.4	$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
Use of 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***	***14.6***	***69.8***	***$60,335***
Green Roofs											
Porous Pavement (Granite dust)			1,000,000 gal	1,000,000 gal	1,000,000 gal	1,000,000 gal	2,000,000 gal	2,000,000 gal	2,000,000 gal	23.5	$20,321
Grass											
Low / no mow area											
Green Space (shrubs and bushes)											
Re-use of Collected Storm-water											
On-Site 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	3,500,000 gal	34.4	$29,772
Native Plants			350,000 gal	350,000 gal	350,000 gal	350,000 gal	700,000 gal	700,000 gal	700,000 gal	11.9	$10,242
Leaves Composted											
Electronics/EPEAT											
Total Savings (MTCO2e)				***1.0***				***1.4***	***3.7***	***6.1***	***$153***
Recycling of Electronics				0.625 tons				0.865 tons	1.76 tons	5.2	$130
Re-Use/Donation of Used Computers											
Toner/Ink Recycling and Use of Recycled Ink											
Battery Recycling									.58 tons	0.9	$23

Environmental Metrics	Jun '09 MOU	Dec '09 Update	Jun '10 Update	Nov '10 Update	Jun '11 Update	Feb '12 Update	Feb '13 Update	Feb '14 Update	Mar '15 Update	Total MTCO2e	Cost Savings (Est.)
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***	***1,416.6***	***9,713.9***	***$10,325,081***
Vehicles Miles Avoided(VMT)			3,025,000 miles	3,025,000 miles	3,025,000 miles	3,176,250 miles	3,176,250 miles	3,176,250 miles	3,176,250 miles	9,713.9	$10,325,081
Transportation											
Total Savings (MTCO2e)			***1.7***		***44.3***	***50.6***	***76.0***	***76.0***	***76.0***	***324.5***	***$140,000***
Hybrid / Electric Vehicles					32 vehicles	32 vehicles	32 vehicles	32 vehicles	32 vehicles	322.8	$140,000
Biodiesel Vehicles											
Clean Construction Vehicles			1.68 MT-CO2e							1.7	
LNG Vehicles											
Alternate Fuel Vehicles (Zipcar)											
Smartway Transporters											
Bike Racks											
LEED Projects											
Total Savings (MTCO2e)											
Silver - 10%											
Gold - 17%											
Platinum -20%											
MTCO2e Savings											
Total (MTCO2e)	***195,893.2***	***2,344.6***	***8,402.0***	***6,326.0***	***3,733.1***	***5,524.8***	***8,359.1***	***8,524.6***	***6,981.1***	***247,379.4***	***$23,549,348***
Energy	**0.0**	**206.4**	**206.4**	**109.4**	**1,780.0**	**3,204.0**	**4,984.0**	**4,984.0**	**5,133.5**	**20,607.6**	**$3,698,614**
Alternative Energy	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**249.2**	**249.2**	**249.2**	**747.6**	**$131,565**
Water	**0.0**	**0.4**	**44.1**	**44.1**	**43.8**	**43.8**	**87.5**	**87.5**	**87.5**	**438.7**	**$308,813**
Solid Waste	**983.6**	**1,105.9**	**1,569.2**	**504.4**	**507.8**	**802.5**	**1,500.0**	**1,659.7**	**0.0**	**10,526.9**	**$611,847**
Green Procurement	**194,909.7**	**1,031.9**	**5,224.1**	**4,310.7**	**0.8**	**0.0**	**31.3**	**35.7**	**0.0**	**204,944.2**	**$8,272,940**
Green Landscaping	**0.0**	**0.0**	**7.3**	**7.3**	**7.3**	**7.3**	**14.6**	**14.6**	**14.6**	**69.8**	**$60,335**
Electronics	**0.0**	**0.0**	**0.0**	**1.0**	**0.0**	**0.0**	**0.0**	**1.4**	**3.7**	**6.1**	**$153**
Mass Transit	**0.0**	**0.0**	**1,349.2**	**1,349.2**	**1,349.2**	**1,416.6**	**1,416.6**	**1,416.6**	**1,416.6**	**9,713.9**	**$10,325,081**
Transportation	**0.0**	**0.0**	**1.7**	**0.0**	**44.3**	**50.6**	**76.0**	**76.0**	**76.0**	**324.5**	**$140,000**



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

2015

OPERATIONS PHASE SUSTAINABILITY GOALS & ACCOMPLISHMENTS

MetLife Stadium continues to make 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. As of 2015, Metlife has as achieved their highest diversion rate to-date at 54%.

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.