

	Project Name, LOC	formula	implemented MT GHG	planned MT GHG	conceptual MT GHG	Municipal Energy efficiency- kwh saved per year	MW potential gained	MW potential gained	
1	Green Energy Park on Seaside Landfill GE-2	Solar: 2.86 Mw = 2860 Kw x .13 conversion factor x 8 hours per day x 365 days in a year = 1085656 Kwh = 766 MT GHG Fuel Cell (scaled from Dominion Fuel Cell K15): 5.66 Mw / 14.9 Mw = .38 Production of Dominion fuel cell. .38 Reduction of 42,188 MT GHG = 16,032 MT GHG		16798				8.52	energy generation
2	Biomass Anaerobic Digester GE-2	(Scaled from C-31) 1.3 MW / 3 MW = .43 Production x 23,400,000 kWh = 10,062,000 kWh produced = 7,099 MT GHG		7,099				1.3	energy generation
3	Energy Improvement District Board GE-1	In Bridgeport there are 5122 commercial accounts with an annual Kwh use of 355,449,216. Saving (10%) of that through energy efficiency alone or 35544921 Kwh savings would equal 25,079 MT GHG equivalent/year			25,079				
4	Energy Performance Contracting GE-3	Contellation: Reductions of 63,883 therms of natural gas = 339 MT GHG. Reductions of 1,336,510 kWh = 964 MT GHG			1303				
5	Solar and Alternative Energy Leasing with MSP GE-9	366,541 Kwh converted via EPA (Main Street Power)		259					energy generation
6	Consolidation GE-3	Energy reductions made by consolidating: McLevy Hall- 191,00 kWh, Health and Welfare Building- 488,800 kWh, M&F Building- 459,280, PW Building- 192,650. 1331730 Kwh converted via EPA	940			1331730			
7	Sale Leaseback City Hall and Annex GE-3	196,400 Kwh of energy efficiency improvements (UI reported) converted via EPA		139		196400			
8	Zip Car/Enterprise Fleet Outsourcing T-4	571,548 miles traveled per year by city fleet / 21 mpg average traditional vehicle = 27,217 Gal... 571,548 miles traveled per year by city fleet / 46 mpg average hybrid vehicle = 12,425 Gal. 27,217 - 12,425 = 14,792 gal. reduced = 132 MT GHG			132				
9	Fuel Cell Energy/Dominion Fuel Cell GE-2	115,705,000 kilowatt-hours per year produced by Fuel Cell. (81,636 MT GHG if produce by fossil fuel plant. (NREL) Fuel Cells produce 54% less emissions than American Fossil Fuel Plants. 81,636 MT GHG x .54 = 44,084 MT GHG Reduced	44,084				14.9		energy generation
10	CNG Vehicles T-4	Diesel: 34.78 MT GHG x 4 Trucks = 139 MT GHG CNG: 26 MT GHG x 4 Trucks = 104 MT GHG 139 - 104 = 35 MT GHG reduced	35						
11	Geo Thermal Energy Systems GE-4	1,871,948 Kwh production geothermal system = 1,321 MT GHG.			1321				energy generation
12	Transit First T-4	2 gallons per week x 2675 passes x 50 weeks = 267,500 gallons or 2379 MT GHG per year. Eco pass program (GBT) distributed 2675 ecopasses. Assuming the average person travels approx. 50 miles per week in a single occupancy vehicle, and 20% of passes were unused or not used to full potential, and each person took 2 weeks not using the pass, then 267,500 gallons of gas will be reduced or 2379 MT GHG.	2379						

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13	Arena Fuel Cell GE-7	400 MW fuel cell. 3,398,000 kWh produced by arena fuel cell- 2,397 MT GHG produced by fossil fuel plants. (NREL) Fuel Cells produce 54% less emissions per kWh than the average American fossil fuel plant. 2,397 MT GHG x .54= 1294.5 MT GHG		1294.5					energy generation 400
14	Arena Ball Park Green ing GE-7	Arena Ball Park - Tunnel lighting- will save 876 kWh per year = .6 MT GHG Low flow fixtures- will save 486 therms of natural gas/year = 2.6 MT GHG reduced		3.2		876			
15	PSEG Peaker Plant Gasification GE-3	Kilowatts/Hours x Hours x Days/year = Annual kWh Existing: 602,000Kwx14daysx24hours= 202,272,000 kWh = 142,713 MT GHG Gasified: 145,431 Kw x 24 Hr x 14 Days = 48,864,816 kWh = 34,477 MT GHG Reductions: 142,713 MT GHG-34,477 MT GHG =108,236 MT GHG Adjusted reductions: 108,236 MT GHG x .1766 percentage of all energy used by Bridgeport residents = 19,114 MT GHG reduced		19,114					
16	Solarize Program GE-9	15 installations x 7.1 Kw average installtion = 106.5 Kw x .13 capacity factor x 8 hours per day x 365 days a year = 40427 kWh per year = 28.5 MT GHG	28.5						energy generation 0.1065
17	Solar Installations on City/School Buildings with Solar City GE-9	2 Mw = 2000 Kw x .13 conversion factor x 8 hours per day x 365 days in a year = 759,200 kWh = 536 MT GHG 2,400,000 kWh reported by Solar city = 1,693 MT GHG		536					energy generation 0.002
18	PSEG Solar Program GE-9	247,741 kWh/year reported by PSEG = 175 MT GHG		175					energy generation
19	WPCA Management WR-2	WPCA Plants used 16984600 kWh in 2012. 60% of this water is unmetered stormwater = 10,190,760 kWh. Reducing this by 10% with green infrastructure will result in a reduction of1,019,076 kWh. Equals 719 MT GHG			719				
20	Complete Streets Policy T-5	400 trees x .0039 MT GHG reduced per year =		1.5					
21	Green Infrastructure and Save the Sound WR-3	9855000 gal x .00455 kWh per gal = 44,840 kWh reduced = 32 MT GHG reduced		32					
22	Lincoln Boulevard Complete Street T-5	1872000 gal reduced x .00455 kWh per gal = 8518 kWh reduced = 6 MT GHG		6					
23	Seaside Buffer Climate Mitigation Reconstruction CC	88,886,294 gallons buffered / per year x .00455 kWh per gallon = 404432 kWh reduced = 285 MT GHG Reduced		285					
24	Arena Green Infrastructure Parking WR-2	1,912,500 gallons sheet flow/year x .00455 kWh per per gal = 8702 kWh reduced = 6 MT GHG reduced		6.00					
25	Sikorsky Streetscape WR-2	900,000 gal x .00455 kWh per gal treated = 4095 kWh reduced = 3 MT GHG reduced		3					
26	Green Procurement W-5	The City spends approximately \$4,672,000.00 for office supply paper each year which equals 2,224 MT. This results in a generation of 1,891 MT GHG emissions per year. By shifting to as little as a 35% post consumer content (515.73 MT) reduces total GHG emissions by 1375 MT CO2.	1375						

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27	Recycle Bank/ Single Stream W-1	170 tons more being recycled each month x 2.67 MT GHG per ton waste diverted = an additional 454 MT GHG CO2 emissions reduced per month x 12= 5448 MT/year	5448						
28	Green Point Anaerobic Digester GE 3	23,400,000 kWh per per year. (8,760 hours (Green Point) * 3,000 kW * 90% capacity factor). = 16,510 MT GHG		16,510					energy generation
29	Mattress Recycling W-1	375 tons of solid waste. 2.67 MT GHG is contained within 1 ton of solid waste (EPA). 375 x 2.67 = 1001 MT GHG	1001						
30	Seaside Grove WR-2	15,550 sq ft of permeable surface created x 5 gallons / sq ft = 77500 gallons x .00455 kWh per gallon = 353 kWh reduced = .25 MT GHG (Energy Plan 2008)		0.25					
31	Downtown Wayfinding T-6	Assuming 105 people walk and 80 will bike instead of driving during 1-2 mile trips, 49 MT GHG will be reduced.		49					
32	NRZ work LU-4	2500 square feet of permeable surface created = 12,500,000 gallons per year diverted x .00455 kWh per gal = 56875 kWh reduced = 40 GHG Reduced		40					
33	Bike Share and Bike Trail Programs T-7	(Bridgeport Carbon Inventory 2008) Road transportation accounts for 92.5% of all transportation emissions in Bridgeport. All transportation emissions in Bridgeport are 339,386 MT GTG x .925 = 313932.05 MT GHG road emissions. If we can lower this by 1%, than we can reduce 3139 MT GHG		3139					
34	Mayor's tree planting program GS-5	0.039 metric ton CO2 per urban tree planted for ten years / 10 = .0039 MT GHG per tree per year x 2500	9.75						
35	NuPower Thermal Loop GE-4	12,900 MT GHG reported by NuPower		12,900					
			55300.25	78389.45	28554				
				total	162243.7				
			28.5			1,529,006	14.9	409.9285	total ren. energy potential