Solar Power Generation Capacity of Bayridge, Sunset Park & Fort Hamilton Neighborhoods (Brooklyn)

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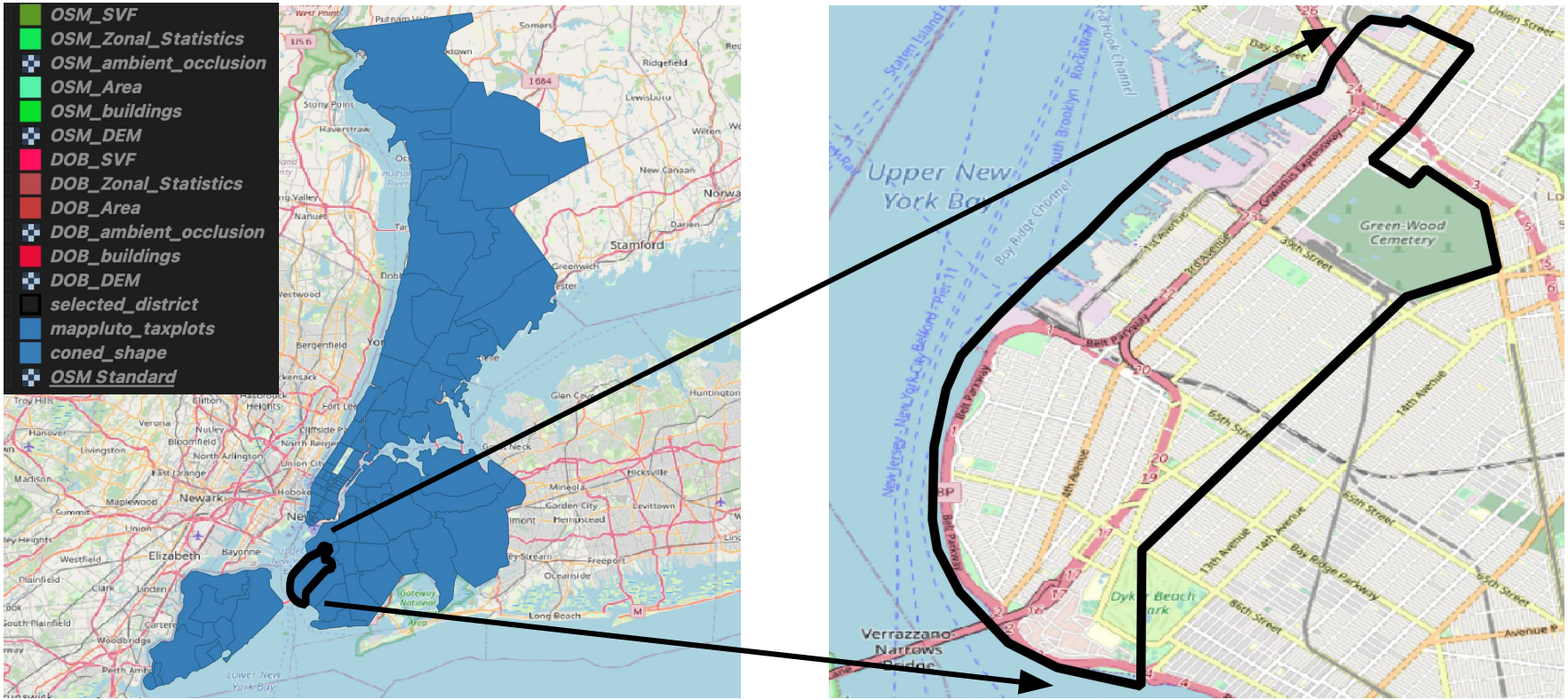
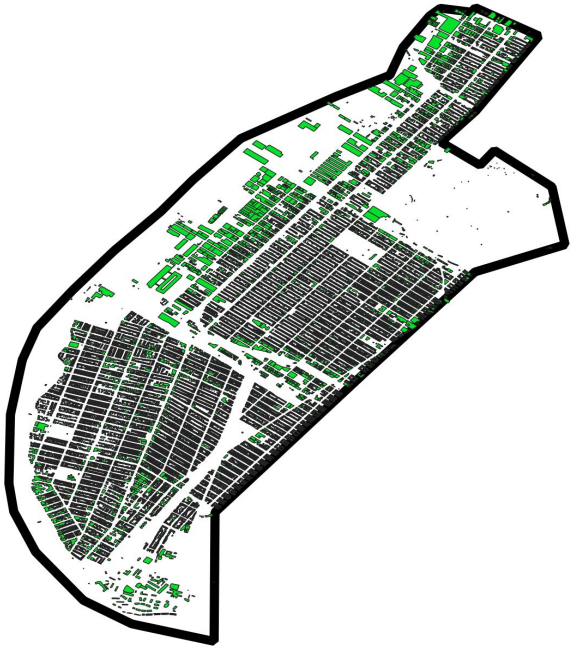
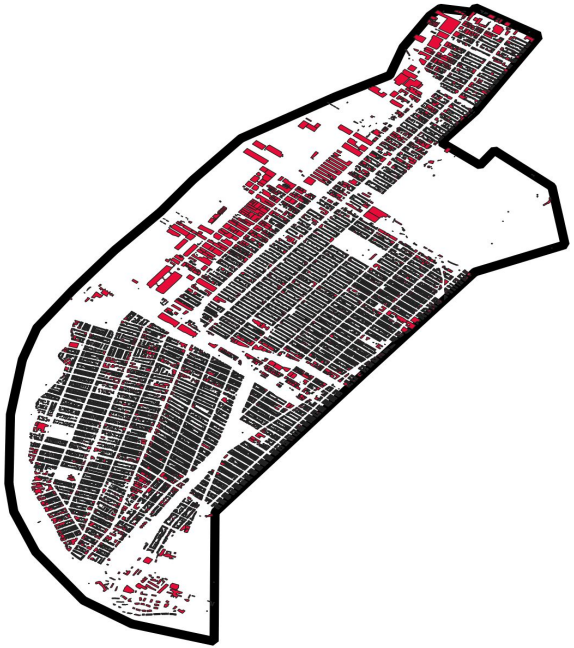
Selecting ConEd Power District containing Sunset Park, Bayridge, and Fort Hamilton Neighborhoods



Comparing Building Footprints

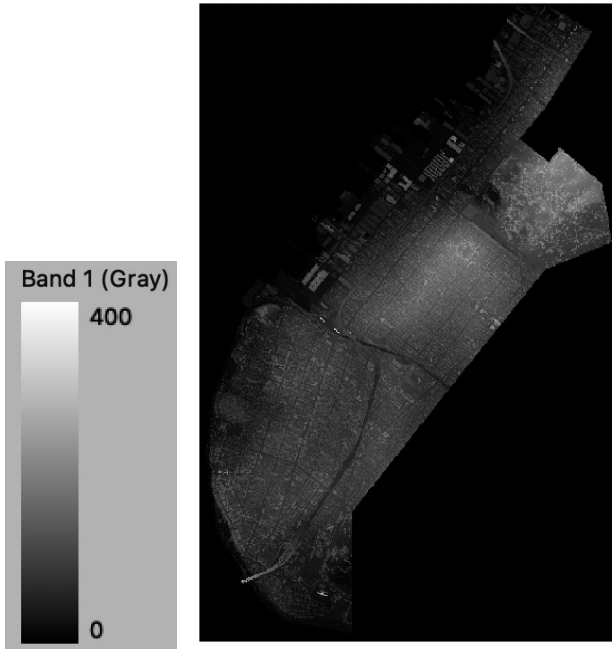


DOB

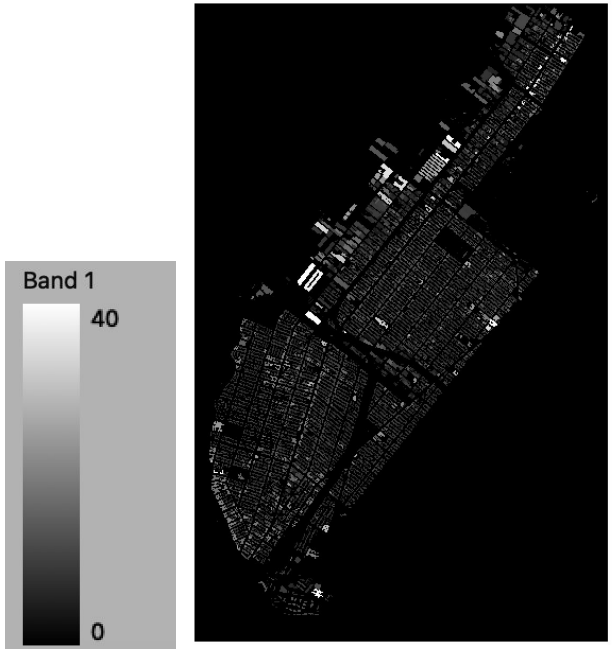


OSM

Comparing DEMs



LiDAR DEM



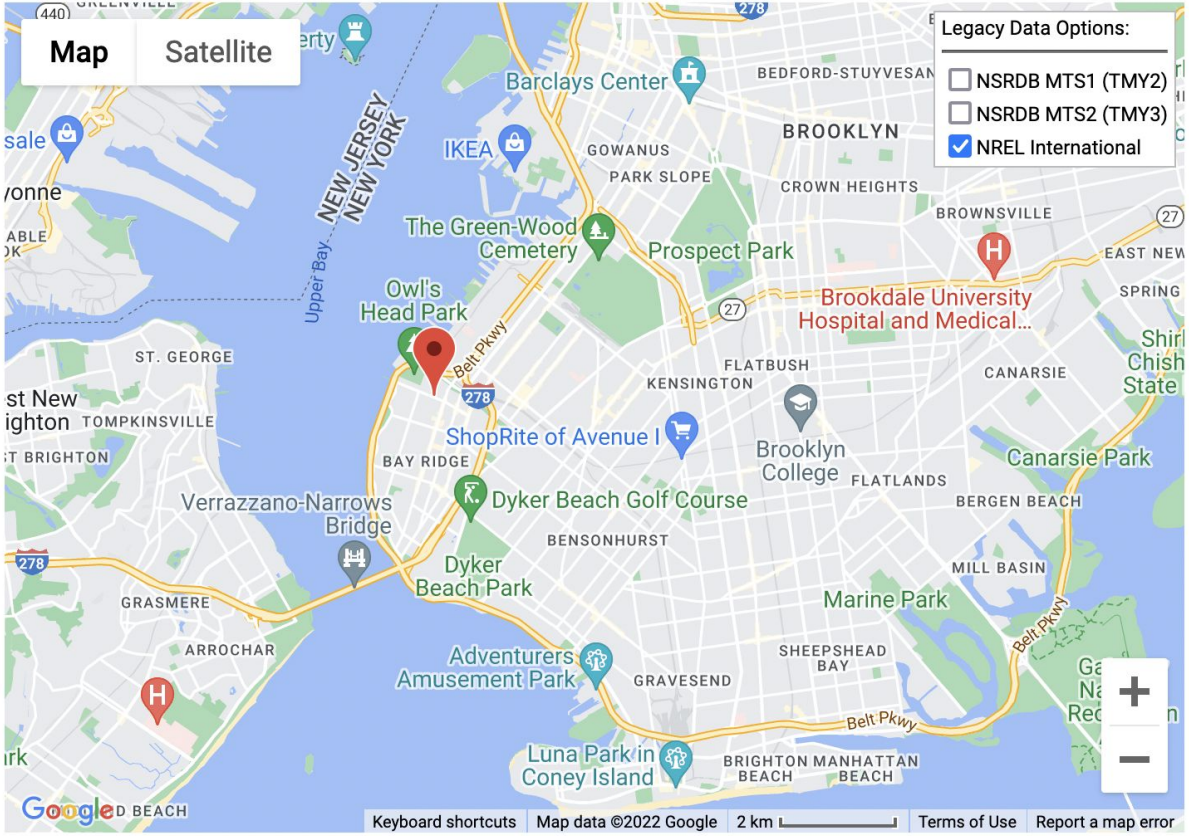
OSM DEM

Area Available for Solar Power Generation

Calculation Method	Area (sq. m)
OSM	4979599.159
OSM SVF	4821248.592
DOB	4966964.473
DOB SVF	2267760.187

Solar Power Generation Capacity & Consumption

Calculating Solar Power Potential



My Location	38.93, -76.46 » Change Location

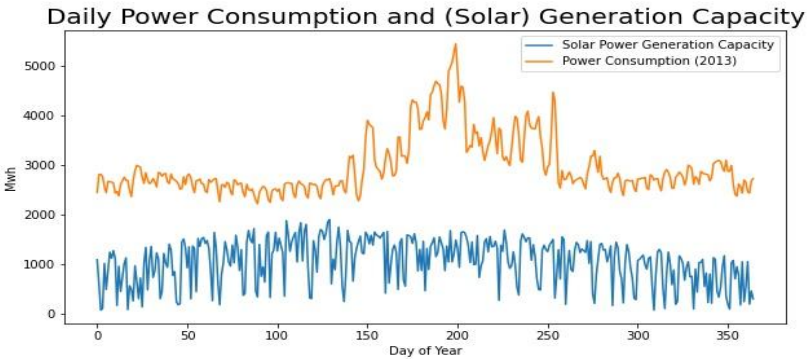
SYSTEM INFO

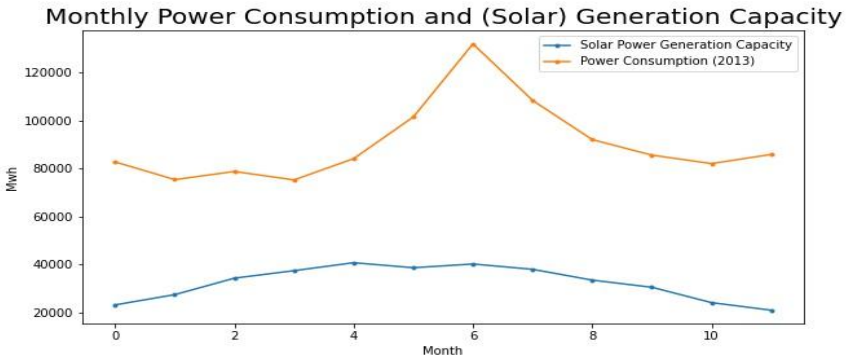
Modify the inputs below to run the simulation.

DC System Size (kW):	0.25
Module Type:	Standard
Array Type:	Fixed (open rack)
System Losses (%):	14.08
Tilt (deg):	20
Azimuth (deg):	180

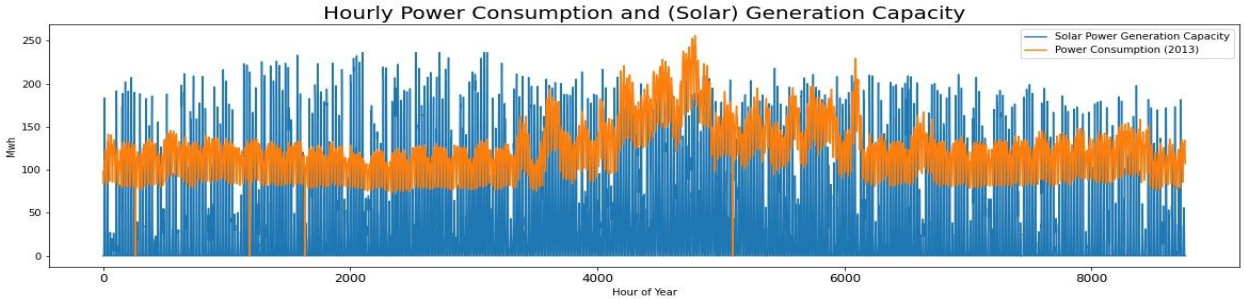
343 kWh/Year

Power Consumption & Solar Power Generation Capacity





Scale	Fraction of Consumption that Solar Power can Sustain
Monthly	37.40%
Daily	36.50%
Hourly	33.40%



The 2030 target (50% renewable energy) cannot be achieved for this set of neighborhoods using only solar energy. However, it can contribute to a significant portion of the target (around 30%).