

Ways towards A Net-Zero Society, Take NYC as an Example

19-603 Project Sprint #01:

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Due to unexpected time we spent in finding detailed dataset of energy consumption in selected cities and proper shapefiles for conducting spatial join operations, we did not make it to fit the first model in time. However, since we've successfully found proper dataset and conducted initial transform operations and I will join the office hour next week in person and share the progress we made. We tried our best and are stressed out right now. I hope you can grade us based on the progress that we will share with you on Monday. Really hope you understand

Updated Data Sources

Our GitHub Repo for data and code: <https://github.com/Ritsuko-xu/19433-2000wattCommunity/> You can browse our dataset files and data source citations under “dataset” subfolder.

- 1. The economic, demographic and social dataset will be from Census Bureau <https://data.census.gov/advanced>. This is one of the best data source for such analysis related to society and population.
- 2. NYC open data, where we can find building benchmarking data The NYC Benchmarking Law requires owners of large buildings to annually measure their energy and water consumption in a process called benchmarking. <https://data.cityofnewyork.us/Health/rodent-bbl/2brg-uyvv/data>
- 3. NYC open data. BBL dataset mapping buildings to longitude and latitude coordinates. <https://www.nyc.gov/site/planning/data-maps/open-data/dwn-edesignations.page>
- 4. A dataset mapping census tracts to zip code areas. This dataset is used for spation join operations. https://www.huduser.gov/portal/datasets/usps_crosswalk.html#data

3. Research Progress

- 1. Joined census data in #01 dataset into buildings energy consumption data in #02 dataset
- 2. Created model for electricity consumption ~ household income