



DRAWDOWN GA

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Commercial Sector

Local GHG Emissions Tracker

Technical Documentation
Figures for Major Data Sources
and Emissions Calculations



Commercial sector emissions

Commercial data sources

1. EIA Open Data API monthly data
 - a. Commercial natural gas deliveries
 - b. Prior calculation of commercial electricity emissions
2. Census Quarterly Workforce Indicators (**QWI**)
employment by county and NAICS code
3. EIA commercial buildings energy consumption survey (**CBECS**) microdata from 2012
4. EIA **crosswalk** to convert NAICS employment to CBECS
Principal Building Activity employment

Commercial basic strategy

1. From the EIA API download monthly statewide commercial **natural gas** deliveries and calculate natural gas emissions
2. Load prior calculated commercial **electricity** emissions
3. Download, if needed, most recent QWI **NAICS county employment**, forecast and interpolate to generate monthly employment
4. Convert NAICS employment to CBECS **Principal Building Activities**
5. From CBECS microdata, calculate PBA **energy use per employee factors** for electricity, natural gas, and district heat
6. Apply CBECS factors to county employment, sum by energy source
- 7. Allocate** statewide emissions by county percent of energy use for each fuel

Commercial emissions

