

**CITY OF ALBANY
MEMORANDUM**

DATE: September 19th, 2017
TO: Sustainability Committee
FROM: Claire Griffing, Sustainability Coordinator
SUBJECT: City of Albany 2015 Greenhouse Gas Inventory Update

BACKGROUND

The City of Albany prepared a baseline greenhouse gas emissions (GHG) inventory of 2004 emissions in 2006, which in turn informed the creation of the City’s Climate Action Plan, adopted in 2010. Stopwaste conducted a comprehensive GHG inventory update of 2010 emissions in 2012, including municipal emissions. A subcommittee of the Sustainability Committee has been tracking emissions trends since then.

DISCUSSION

The City’s CivicSpark Climate Fellow has completed GHG inventory of 2015 emissions in 2017, using ICLEI’s SEEC ClearPath tool. The 2015 greenhouse gas (GHG) inventory update covers emissions from residential, commercial, and industrial energy consumption, waste disposal, and transportation. Due to previous inconsistencies between earlier inventories, emissions from water and wastewater services and certain factors from transportation were not evaluated. Transportation inputs such as off-road vehicles (i.e. ferries, airplanes, etc.) and regional transit systems (Bart and Amtrak) were not accounted for in this update.

ANALYSIS

In 2015, greenhouse gas emissions for the City of Albany totaled 67,863 MTCO_{2e}. This represents a decrease in emissions of about 10% or 7,961 MTCO_{2e} relative to the last inventory update in 2010 and a 17% decrease in emissions since 2005.

Emissions by Year					
Year	Transportation & Mobile Sources	Solid Waste	Commercial Energy	Residential Energy	Total MTCO_{2e}
2005	39,171	1,630	21,005	19,981	81,787
2010	38,018	672	17,393	19,741	75,824
2015	36,988	725	14,461	15,689	67,863
All units are Metric Tons of Carbon Dioxide Equivalent (MTCO _{2e}).					

The transportation sector had the largest amount of emissions, comprising of over 50% of the total inventory GHG emissions. Residential energy consumption totaled 23%, combined commercial and industrial energy at 21%, and solid waste accounting for 1% of overall emissions.

In 2007, the City adopted an aggressive GHG reduction target requiring the community’s GHG emissions to be reduced by 25% below 2004 baseline emission levels by 2020. While this inventory update reflects

a positive trend in the City’s commitment to achieving its GHG emission reduction goals, emphasizing local policies and programs in the next three years will be crucial to reaching the stated target.

Data Challenges

The City was not able to obtain all commercial/industrial data requested due to the California Public Utilities Commission (CPUC)’s new data privacy restrictions, called the 15/15 rule. The 15/15 rule states that an aggregation sample must have more than 15 customers and no single customer’s data may comprise more than 15 percent of the total aggregated data. If industrial consumption fails the 15/15 rule, it is rolled into the commercial sector for a combined commercial/industrial consumption data. Because of this, commercial and industrial data was combined from 2005-2014. If a single customer’s data is still comprising more than 15 percent of the total aggregated data, the entire failing sector is dropped. Starting 2014, the industrial sector was entirely dropped.

To account for the missing industrial sector from 2014-2016, the City generated estimates for the combined commercial/industrial sector using the 2005- 2015 Albany Energy Summary provided by PG&E (Attachment 1). The summary gives total aggregate non-residential (commercial/industrial) and residential electricity and natural gas consumption, and breaks down the aggregate kWh or therms consumed into percentages assigned to each category.

The total residential electricity consumption was subtracted from total aggregate consumption to get the commercial/industrial kWh for 2015, as detailed in the table below.

2015 Energy Data			
Sector	kWh	Therms	MTCO2e
Total Aggregated Energy Consumption	59,581,794	3,551,887	30,150
Residential Sector Energy Consumption	22,991,743	2,092,706	15,689
Estimated Commercial/Industrial Sector Energy Consumption	36,590,051	1,459,181	14,461

NEXT STEPS

Staff will continue to work with Stopwaste, the Local Government Commission, and other agencies to address data access issues. In the future, the Bay Area Air Quality Management District (BAAQMD) will be completing greenhouse gas inventories for individual cities using a standardized methodology.

ATTACHMENTS

1. 2005- 2015 Albany Energy Summary