

Greenhouse Gas Inventory

Background

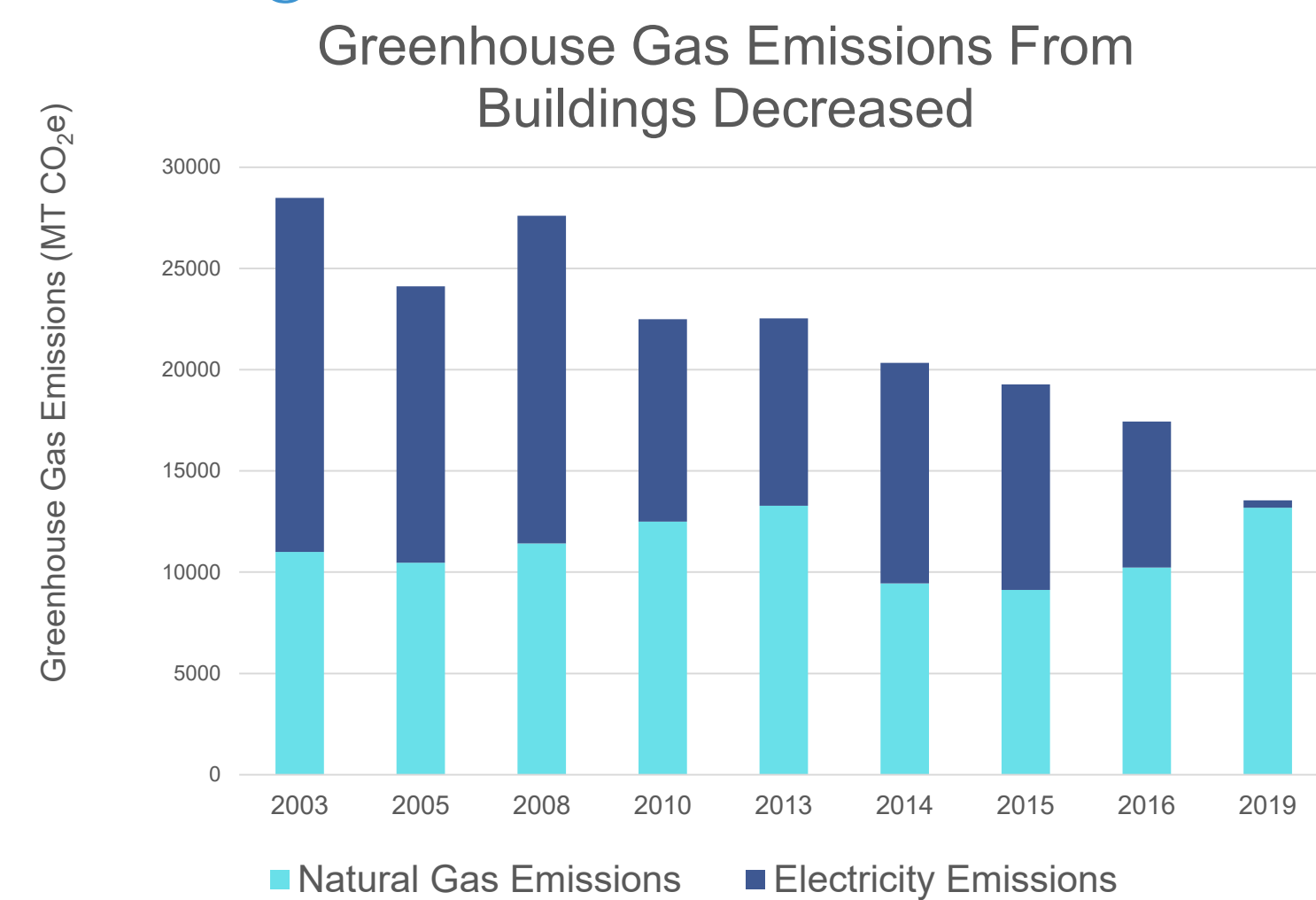
Alameda County, California, is in the East Bay and has about 9,500 employees. Since 2003, we have been conducting greenhouse gas inventories of our government operations to track our progress towards reducing our emissions by 80% by 2050. Our 2019 inventory showed that we are on track for this goal, with a 31% reduction since 2003! A majority of those reductions can be credited to the switch to clean electricity.

100+ buildings that the County owns or leases switched to East Bay Community Energy's **clean electricity** in 2018.

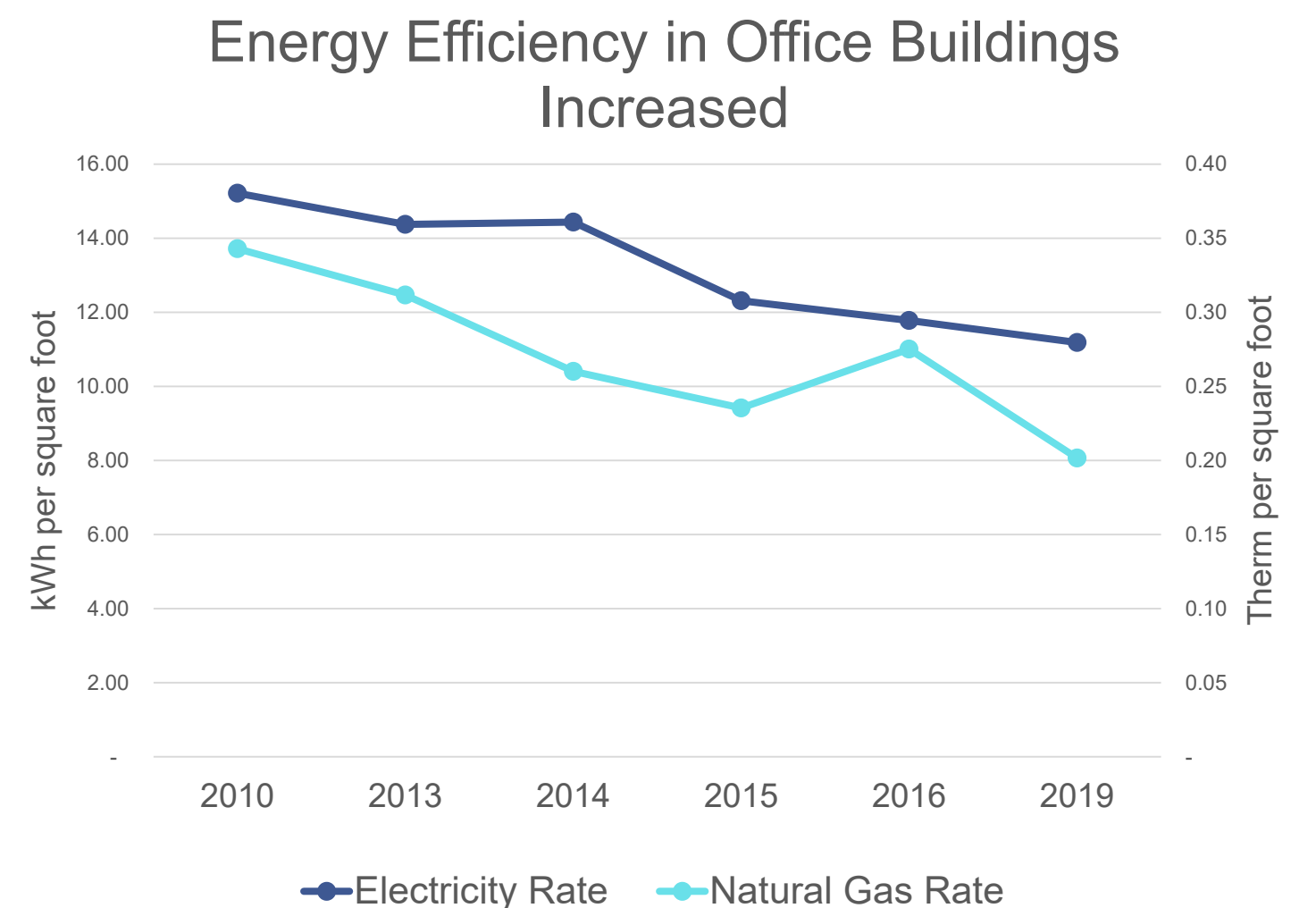
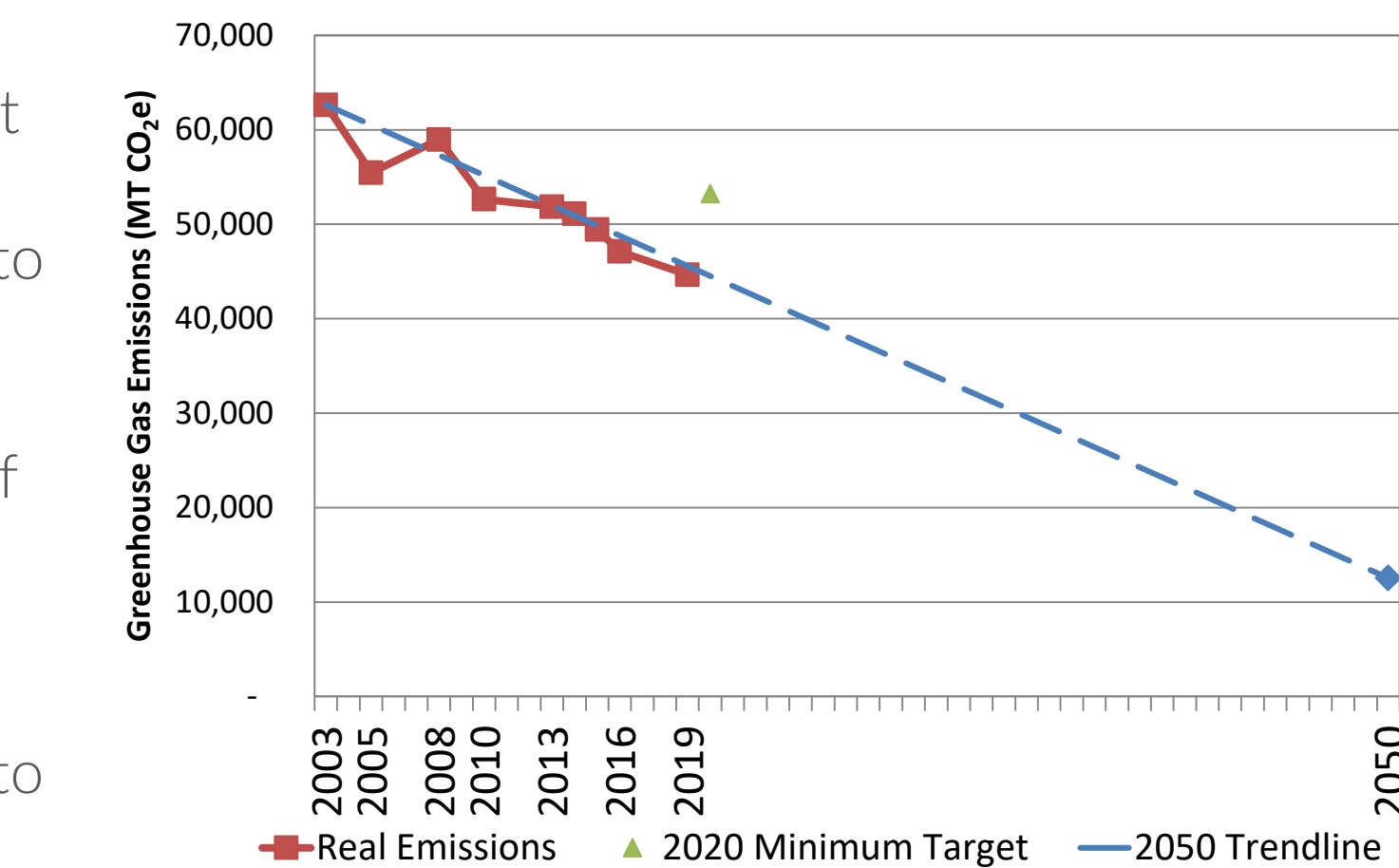
Process

I led the Buildings & Infrastructure section of the 2019 inventory. I collected electricity and natural gas data from our Energy Program and local utilities EBCE and PG&E. Using the GHG Protocol and staying consistent with previous inventories' procedures, I analyzed the data and estimated usage for unmetered buildings.

Findings



52% reduction in building emissions since 2003



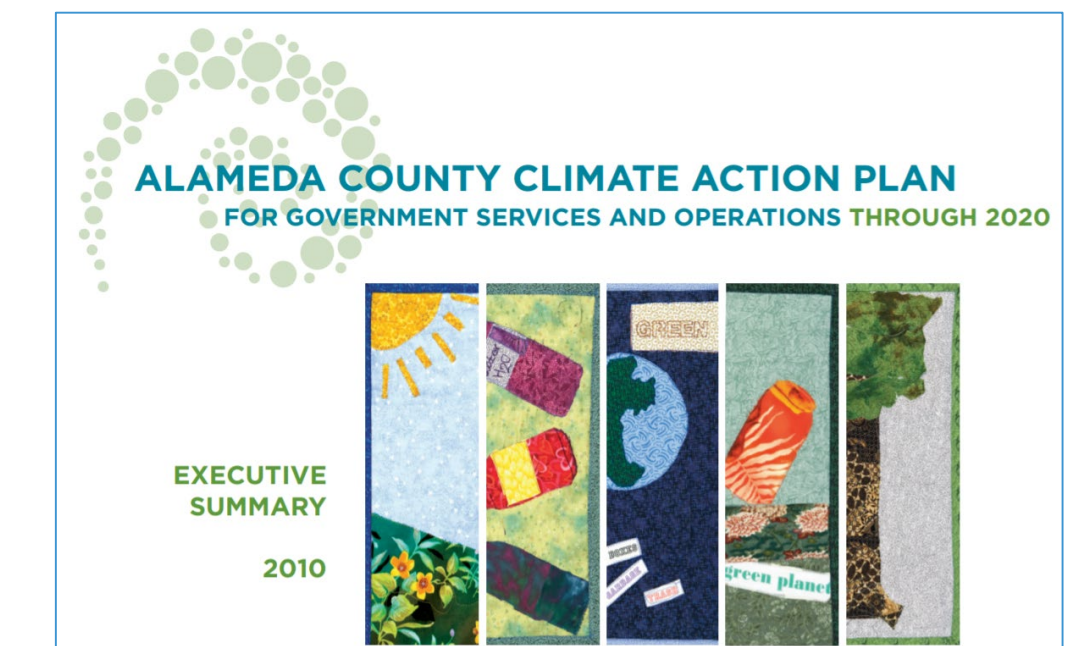
26% reduction in electricity use rate & 40% reduction in natural gas use rate since 2010

Climate Action Plan Recommendations

We are currently working with stakeholders to develop the next Climate Action Plan for Government Services and Operations, after successfully completing the 2010-2020 Plan.

Recommendations for Built Environment:

- **Electrify** building equipment at time of natural replacement
- Support remote work initiatives and other programs to **reduce office space** needs
- **Right-size** our building portfolio by divesting from the most inefficient buildings
- Add additional **on-site renewable energy** production and micro-grids with sufficient battery storage for resiliency



Deep Dive: Electrification

- State regulations and local jurisdictions are moving towards electrification policies.
- Electrification reduces emissions because it switches natural gas equipment, such as boilers and furnaces, to equipment that uses clean electricity.

Natural gas results in 97% of the building sector's emissions and 30% of total inventory emissions.

Electrifying our natural gas equipment would significantly reduce our building emissions and total inventory emissions.

