



# Integrating Decarbonization Strategies into Multifamily Retrofit and Construction Programs

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## Overview

- Needs and Opportunities
- Local Government Priorities
- Historic Challenges
- Current Solutions
- Future Needs

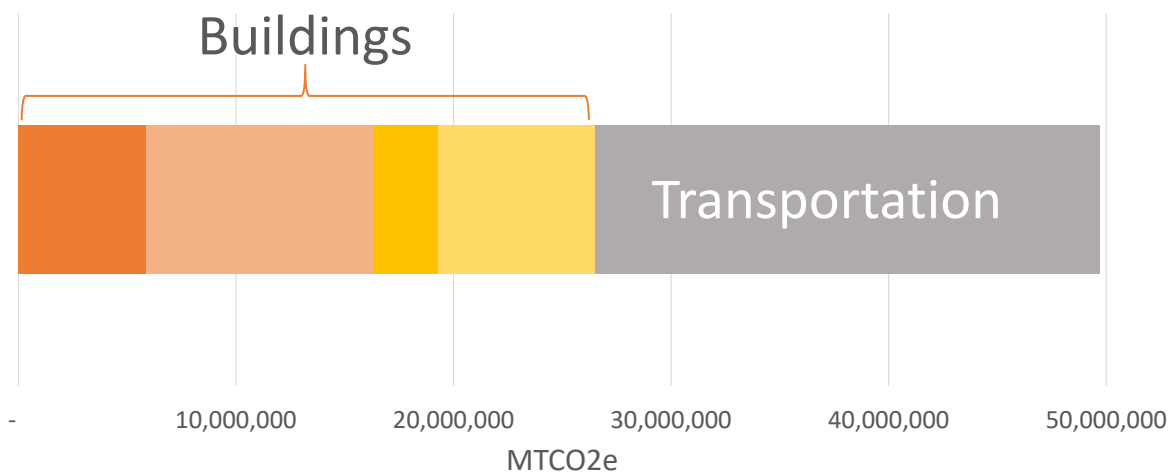


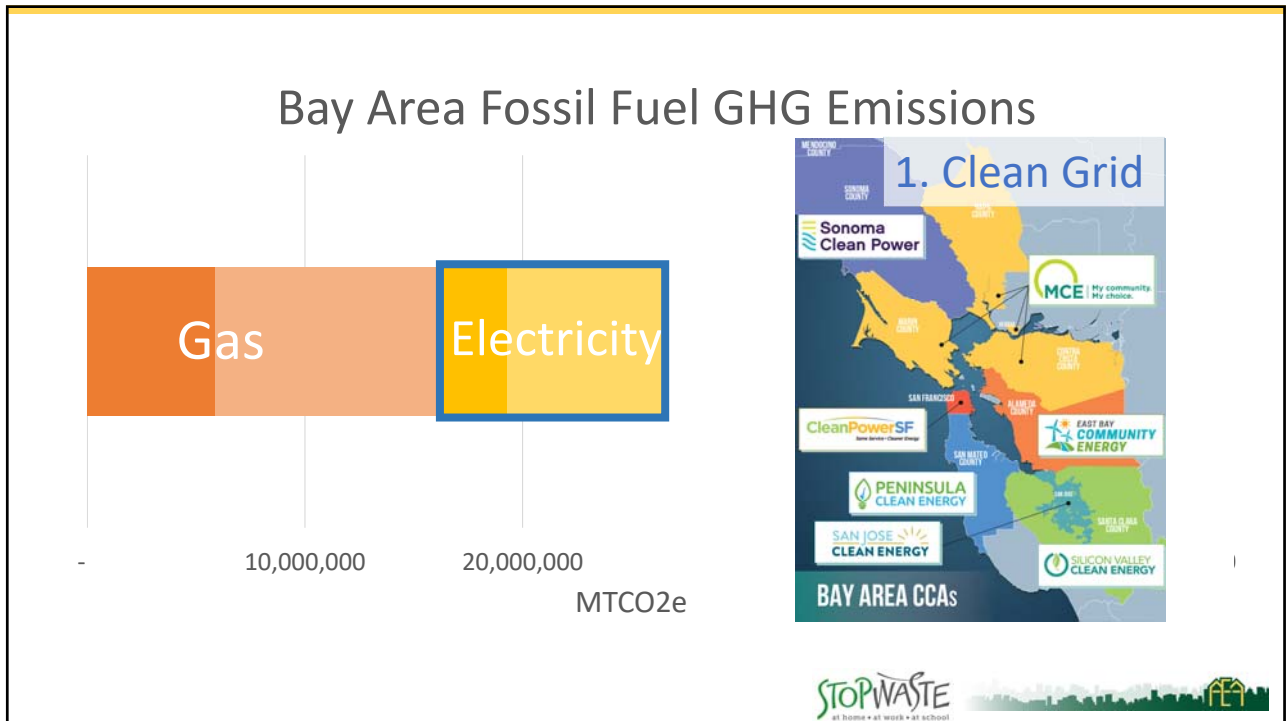
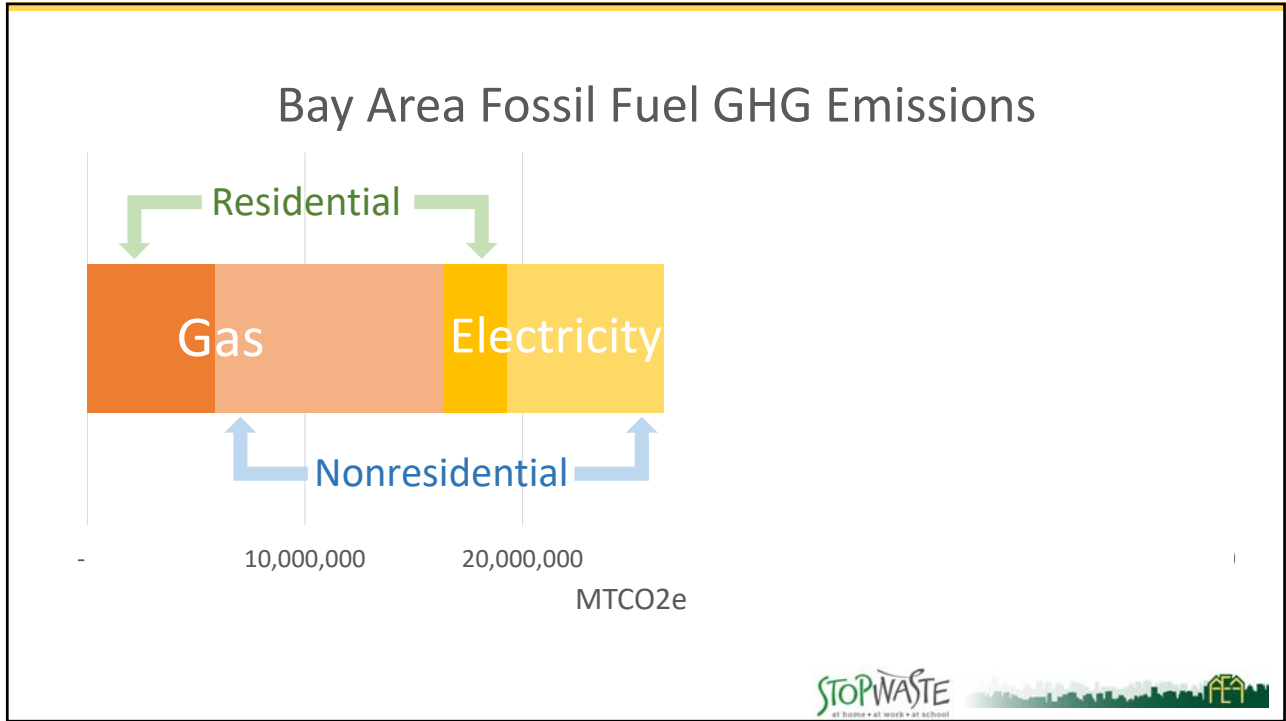
## Need and Opportunities

- Overcome retrofit costs, including ancillary costs, especially for proactive replacements or when lack of property reserves/financing
- Provide Technical Assistance (for retrofits)
- Provide Technical Assistance (for NC)
- Make it local and state government policy priorities
  - Permitting
  - Code compliance
  - Government support

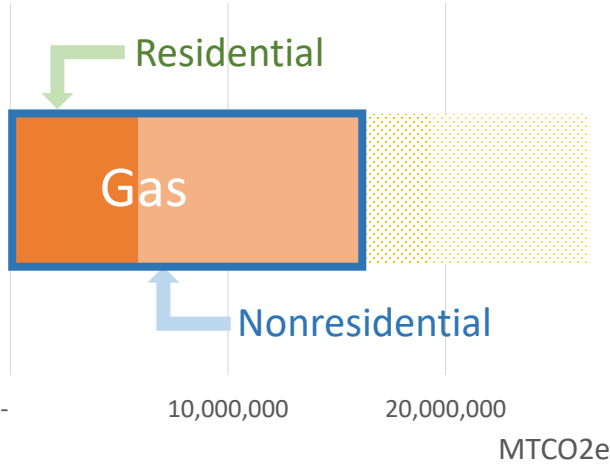


## Bay Area Fossil Fuel GHG Emissions Buildings





# Bay Area Fossil Fuel GHG Emissions



## 2. Electrification



## Historic Obstacles to Providing More Support for Electrification

- Code historically gave preference to gas equipment relative to electric
  - impacted any over-code subsidies
  - created challenges at plan check/permit
- Utility funded programs had statewide rules preventing efficiency rebates being used for fuel substitution (gas to electric or vice-versa)
- Lack of local air quality or GHG based incentives
- **Current solution is combine programs, identify different funding sources with varying priorities, all to meet the same end goal – less GHG, better air quality, and improved efficiency!**



## Current Solutions – Partnerships and Pilots

- Partnerships
  - BayREN energy efficiency funds (utility ratepayer funded)
  - + Bay Area Air Quality Management District (BAAQMD) grant
  - = Pilot focusing on Zero Net Carbon instead of Energy Efficiency % Savings
- Low Income Pilots
  - MCE's Low Income Families and Tenants (LIFT)
    - Supported electrification measure as a means of utility bill savings and indoor air quality improvement for income qualified MF renters
    - Included some funding for fuel switching from propane



## Current Solutions – Air Quality and GHG Funding

- Greenhouse-Gas Funded Programs
  - Multifamily Low Income Weatherization Program (LIWP-MF)
  - Incentives for Electrification and Energy Efficiency based on the estimated MT CO<sub>2</sub> reduction from retrofit projects
  - Paired with onsite renewables (PV and thermal) to decrease carbon content of energy
- NO<sub>x</sub> Reduction Programs
  - South Coast Air Quality Management District (SCAQMD)'s Multifamily Affordable Housing Electrification Program
    - Focuses on removing older high NO<sub>x</sub> gas equipment and older Air Conditioning with R-22 refrigerant
    - Prioritize projects near refineries and gas peaker-plants to improve local air quality.



## Current Solutions – New Utility/Ratepayer Programs

- Future Ratepayer and Utility Funded Programs
  - California Public Utilities Commission (CPUC) recently clarified and updated the eligibility requirements for fuel substitution measures
  - New and Existing rebate programs with fuel substitution measures for existing buildings likely in 2020
- SB1477 – Low-emissions buildings and sources of heat energy
  - BUILD – Statewide Incentives for All-Electric Residential and Multifamily New Construction (with minimum set aside funding for Low Income)
  - TECH – Statewide Upstream and Midstream Incentives for Heat Pumps



## Current Solutions – Policies and Technical Assistance

- Cities and Jurisdictions with all-electric new construction ordinances and reach codes (Berkeley, San Jose, many others rapidly following)
- Local Agencies/CCAs providing technical assistance to builders, architects, and engineers
  - East Bay Community Energy
- Education for local cities, building departments, and planners
  - BayREN/ABAG



## What's Next?

- Other recommendations from panelists or the audience?
- Better coordination across agencies
- Need for increased alignment between incentives and state/local policies
- Increased focus on GHG (EE, Electrification, Renewables based on GHG values)
- Addition of Health and Safety funding?



Thanks!

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