

DOCKETED

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Filer:	Stephanie Bailey
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Building Electrification in Palo Alto

Jonathan Abendschein, City of Palo Alto Utilities



City of Palo Alto Utility Services

Electric Utility

- 25,600 residential customers
- 4,000 commercial customers
- Load: 910 GWh (83% commercial, 17% residential)
- Peak Demand: 183 MWh

Gas Utility

- 22,000 residential customers
- 1,550 commercial customers
- Load: 28,400,000 Therms (55% commercial, 45% residential)

Water
Founded 1896



Wastewater
Founded 1898



Electric
Founded 1900

Gas

Founded 1917



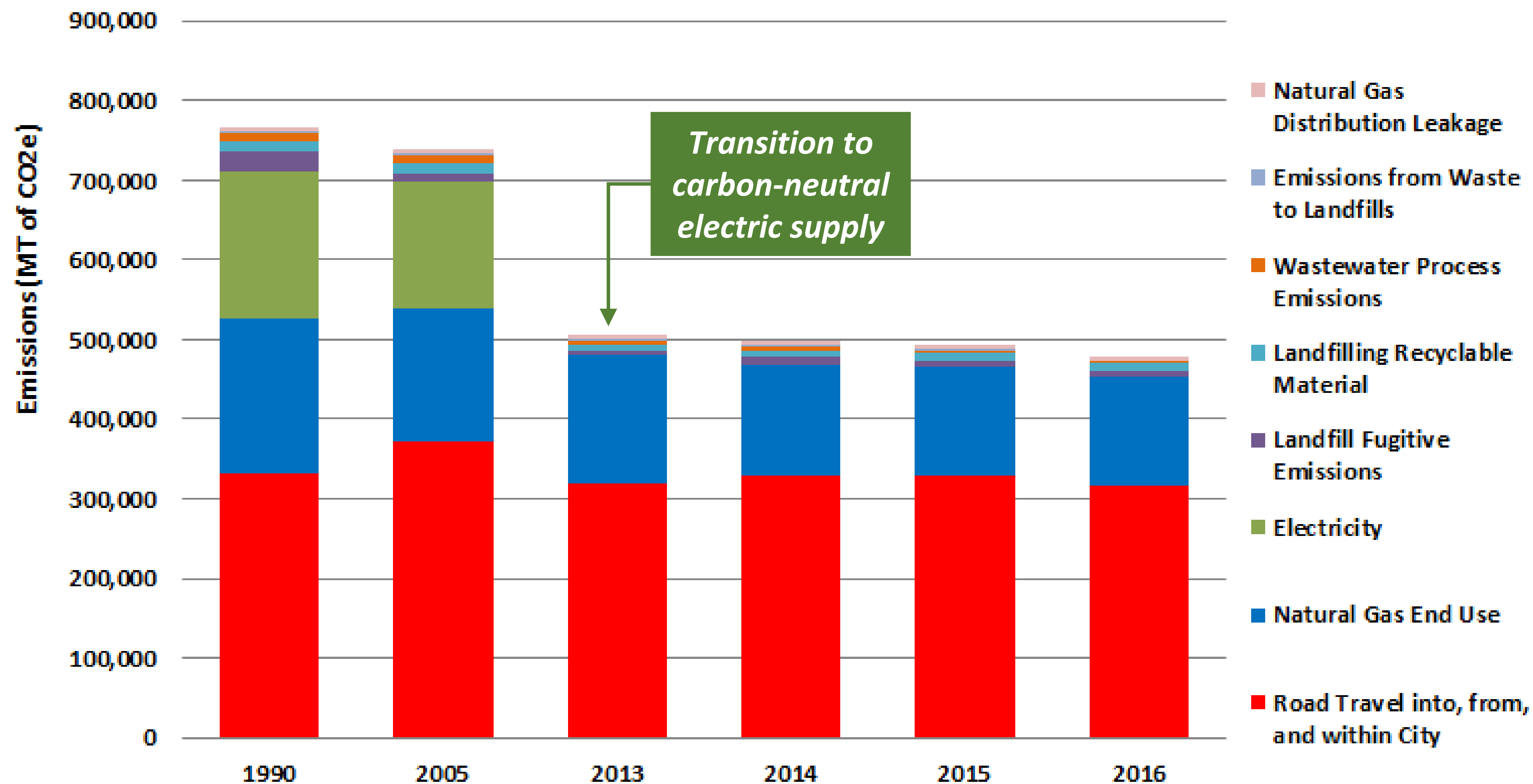
Storm Drain



Fiber
Founded 1996

Palo Alto's Goal: 80% Reduction in GHG by 2030

In 1990, electricity consumption accounted for 25% of the City's GHG emissions; the transition to a carbon neutral electricity supply in 2013 was a significant step to reducing the City's carbon footprint.



Building Electrification in the Community

- Sustainability and Climate Action Plan (2017) provides clear community direction to work on building electrification
- Local building electrification advocates bring innovative program ideas
- Low awareness in the community generally
- Some in the community have raised questions and concerns:
 - Resiliency of single energy source versus multiple energy sources
 - Impact of building electrification on the City's natural gas infrastructure and gas retail rates
 - Who can afford building electrification vs who can't – make sure to keep heating affordable
 - Is there a net carbon reduction from building electrification?

Palo Alto's initiatives related to Building Electrification

To-date:

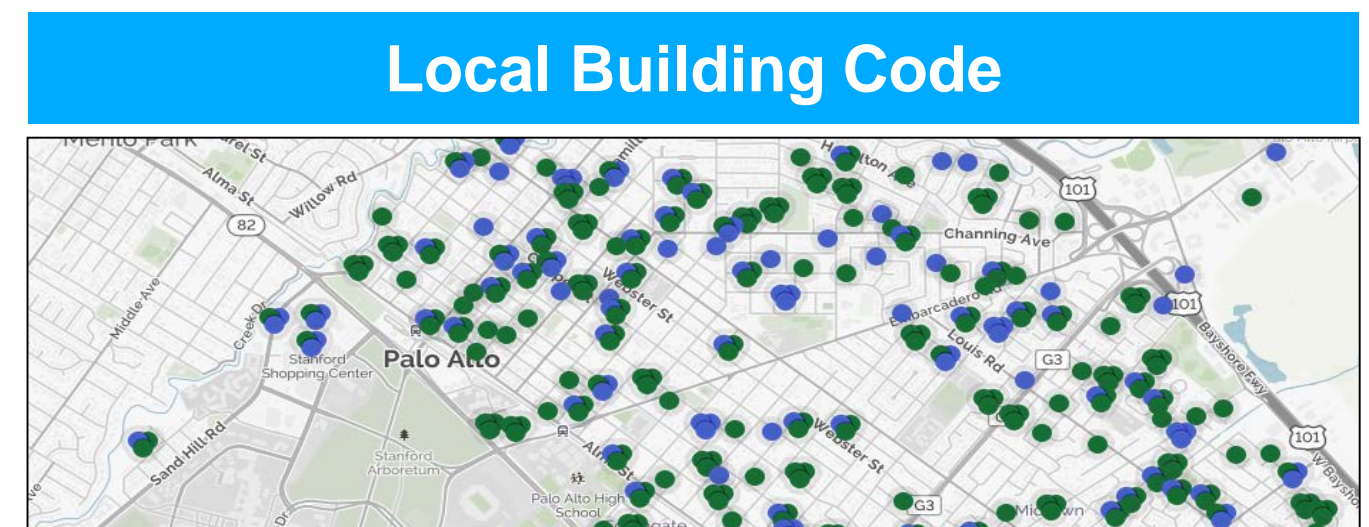
- HPWH rebate program
- Workshops / demonstration projects
- Improved permitting processes

In the next year:

- Exploring regional midstream incentive program with BayREN
- Enhanced assistance to customers in evaluating electrification readiness
- Evaluate electric-ready mandates in 2019 local green building code update

Longer term:

- Heat pump space heating in MF buildings
- Evaluate on-bill financing and direct install



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