

**DOCKETED**

<b>Docket Number:</b>	18-IEPR-09
<b>Project Title:</b>	Decarbonizing Buildings
<b>TN #:</b>	223757
<b>Document Title:</b>	Building Electrification in Palo Alto
<b>Description:</b>	Presentation by Jonathan Abendschein at the June 14, 2018 IEPR Workshop on Achieving Zero Emission Buildings
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<b>Organization:</b>	City of Palo Alto
<b>Submitter Role:</b>	Public Agency
<b>Submission Date:</b>	6/11/2018 1:28:21 PM
<b>Docketed Date:</b>	6/11/2018

# 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**



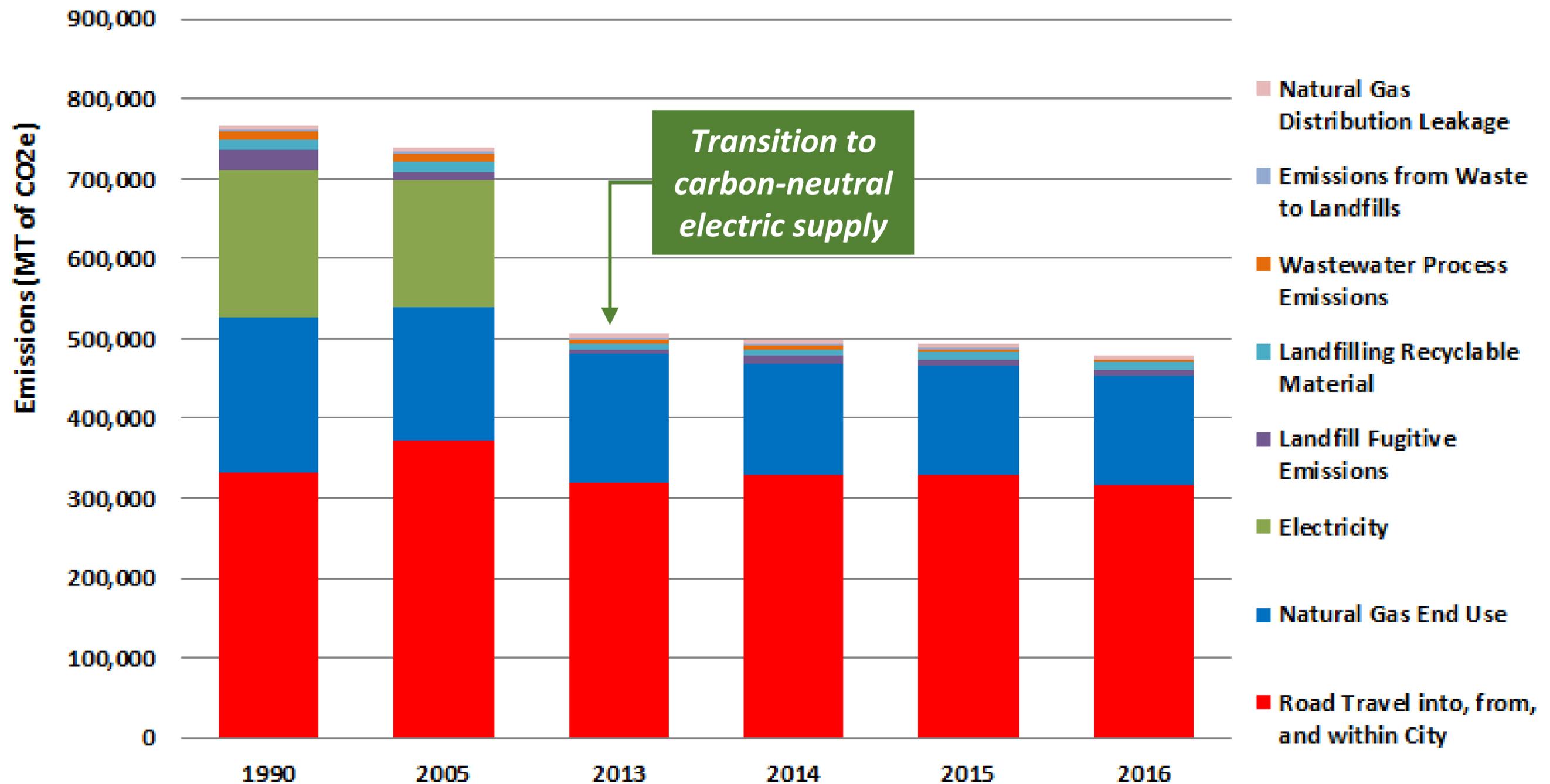
**Storm Drain**



**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



## Education & Outreach



## Local Building Code



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