



# Palo Alto's Business Electrification Program

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[www.cityofpaloalto.org](http://www.cityofpaloalto.org)



# About the City of Palo Alto Utilities (CPAU)

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## At a Glance

- Annual load: ~850 GWh
  - Peak: 180 MW
  - Approximately 29,800 customers
  - Current Supply
    - **100% Carbon Neutral**
    - Market power\* (and RECs)
    - Local solar (Feed-in-tariff NEM 1 and 2)
- \*only during low hydroelectric generation years

## Services and Year Established

Water – 1896      Wastewater – 1898      Fiber – 1996  
Electric – 1900      Gas – 1917

# Palo Alto's Sustainability & Climate Action Plan

## Goal: reduce emissions 80% below 1990 levels by 2030

- As of 2021, GHG reductions are 53.9% below 1990 level

## Business customers account for:

- 15.5% of the City's total GHG emissions
- 7% of all natural gas customer accounts with CPAU
- 55% of total natural gas consumed in Palo Alto each year
- 38% of commercial natural gas usage is from space heating

## Key Actions

- Reduce gas use in non-residential buildings by at least 20%
- Reduce GHG emissions from non-residential equipment like mixed-fuel rooftop units and gas water heating equipment



# Peninsula Conservation Center Project

- The Peninsula Conservation Center (PCC) is home to eleven environmental and non-profit organizations
- After completing this project, their building is all electric

Project Highlights	
Building size:	8,534 sq ft
Year built:	1969
Project details:	Replace eight (8) gas/electric rooftop HVAC packaged units (3 tons each) with all-electric heat pump rooftop units
Project date:	January-March 2023
CPAU rebate:	\$15,600
Estimated bill savings:	Minimum of \$1,500/yr



# Program Development

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## Barriers

- Retrofit costs
- Reluctance to replace equipment before end of equipment's useful life
- Lack of awareness and understanding of efficient electric technologies
- Staff training for operation and maintenance



## Goal

- Inventory of buildings with gas rooftop units (RTUs)
- Provide technical assistance to address barriers
- Help with product and vendor selection
- Offer a financial incentive through rebates

# The Business Electrification Technical Assistance Program (BE TAP)

- Program launched August 3, 2022
- Free consultation and on-site assessment
- Thorough assessment report and project feasibility study
- Ongoing technical support:
  - Help preparing information for bid
  - Equipment and product review
  - Permitting assistance
- Rebates for eligible products to help offset project costs

[www.cityofpaloalto.org/business electrification](http://www.cityofpaloalto.org/business electrification)

**BUSINESS ELECTRIFICATION TECHNICAL ASSISTANCE PROGRAM**

## SHIFT YOUR BUSINESS AWAY FROM FOSSIL FUELS.

The Business Electrification Technical Assistance Program (BE TAP) assists non-residential City of Palo Alto Utilities (CPAU) customers with conversion of gas equipment to efficient electric alternatives at their offices or facilities. Get free hands-on assistance and generous rebates to convert gas equipment to efficient electric alternatives.

### HOW CAN YOUR BUSINESS BENEFIT FROM BUSINESS ELECTRIFICATION TECHNICAL ASSISTANCE?

Property owners, managers, tenants and others can enjoy the many benefits of electrification, including:

				
Free consultation and on-site assessments to identify electrification options relevant to your business and facility	Generous rebates to offset the costs of electrification projects	Improved health and comfort for building occupants as well as tenant retention	Increased sustainability through conserving natural resources and reducing emissions	Opportunities to upgrade old or inefficient equipment

### HERE'S HOW YOU QUALIFY

You need to be a non-residential customer who receives utility service from City of Palo Alto Utilities (i.e., must pay commercial rates for electric and/or gas utility services)

Your facility is currently in operation

### READY TO GO ELECTRIC?

Sign up for the Business Electrification Technical Assistance Program at [cityofpaloalto.org/business electrification](http://cityofpaloalto.org/business electrification). For questions, call (650) 761-6417 or email [businessenergyadvisor@cityofpaloalto.org](mailto:businessenergyadvisor@cityofpaloalto.org). Scan with your smartphone to learn more.



**Are you a tenant?** Talk to your property owner today about the benefits of the Business Electrification Technical Assistance Program or contact us to learn more.

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UTILITIES

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# Program to Date

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## Participation

- 6 assessments complete
  - Office building
  - Churches
  - Hotel
  - Community facility
- 7 assessments in the pipeline

## Outreach Channels

- Call center campaign
- City staff and other CPAU program leads
- E-newsletters
- Direct in-person outreach
- Bill insert

# BE TAP Customer Example

## Customer A

- 11,600 ft.<sup>2</sup> office building that develops laser products for medical and industrial fiber applications
- High energy use business due to the products they develop
- Participated in both the Business Energy Advisor (BEA) and BE TAP programs
- Natural gas is only used for space heating
- Additional annual bill savings around \$1,500 if they suspend their natural gas service

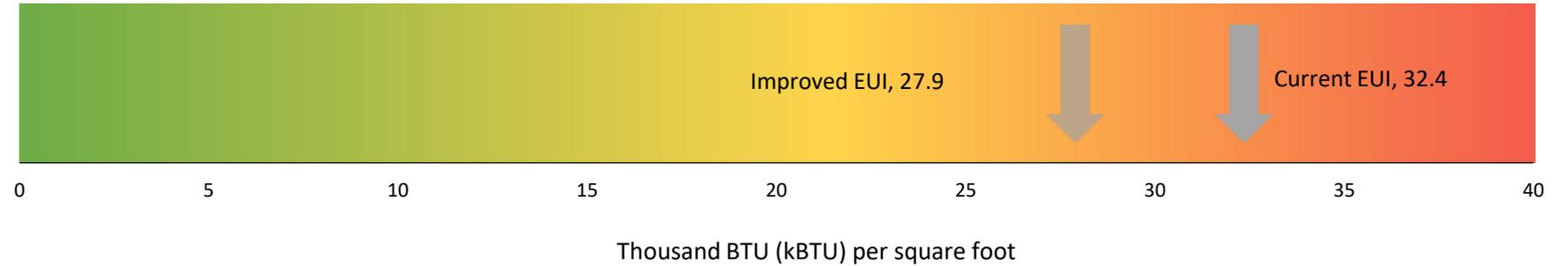


## BE TAP recommendation:

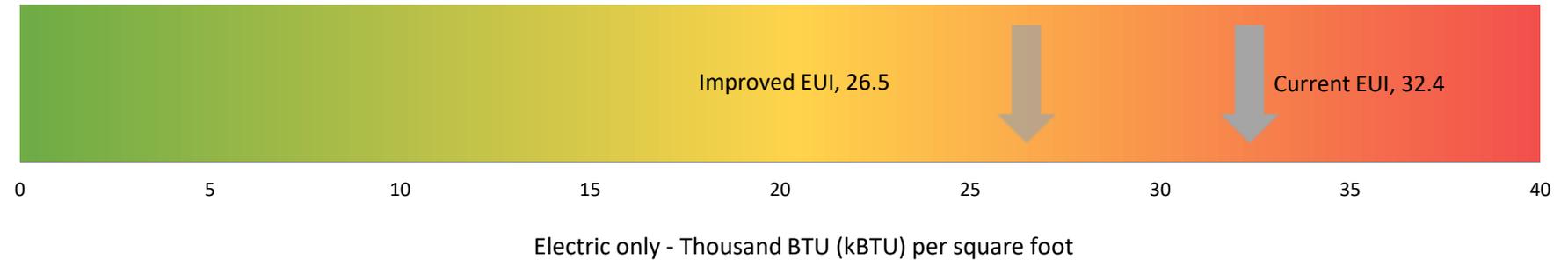
Measure Name	Estimated GHG Reduction* [MT CO2e/yr]	Equivalent Gasoline Burned by Passenger Vehicles* [gallons]	Estimated Natural Gas Reduction* [therms/Yr.]	Estimated Savings [\$ /year]	Estimated Project Cost* [\$]	Estimated Incentive [\$]	Project Cost Covered by Incentive [%]
Package HP	0.76	86	262	2,558	73,134	21,125	29

# Energy Use Intensity Comparison

Efficiency – like-for-like exchange



Electrification – exchange gas for electric heat pump





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**PALO ALTO**

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