

University of California Office of the President Climate Action Plan

Our plans to achieve carbon neutrality by 2025

March 19, 2019



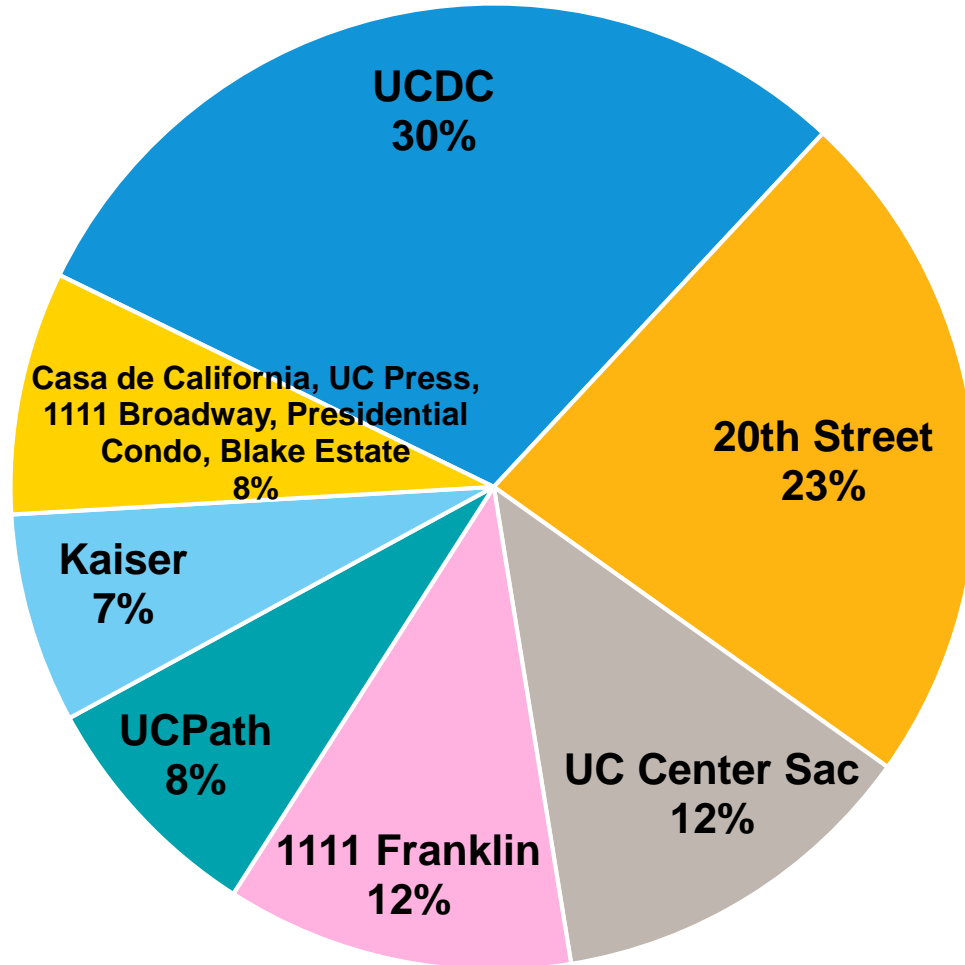
Carbon Neutrality
Initiative

Where are UCOP's Facilities?

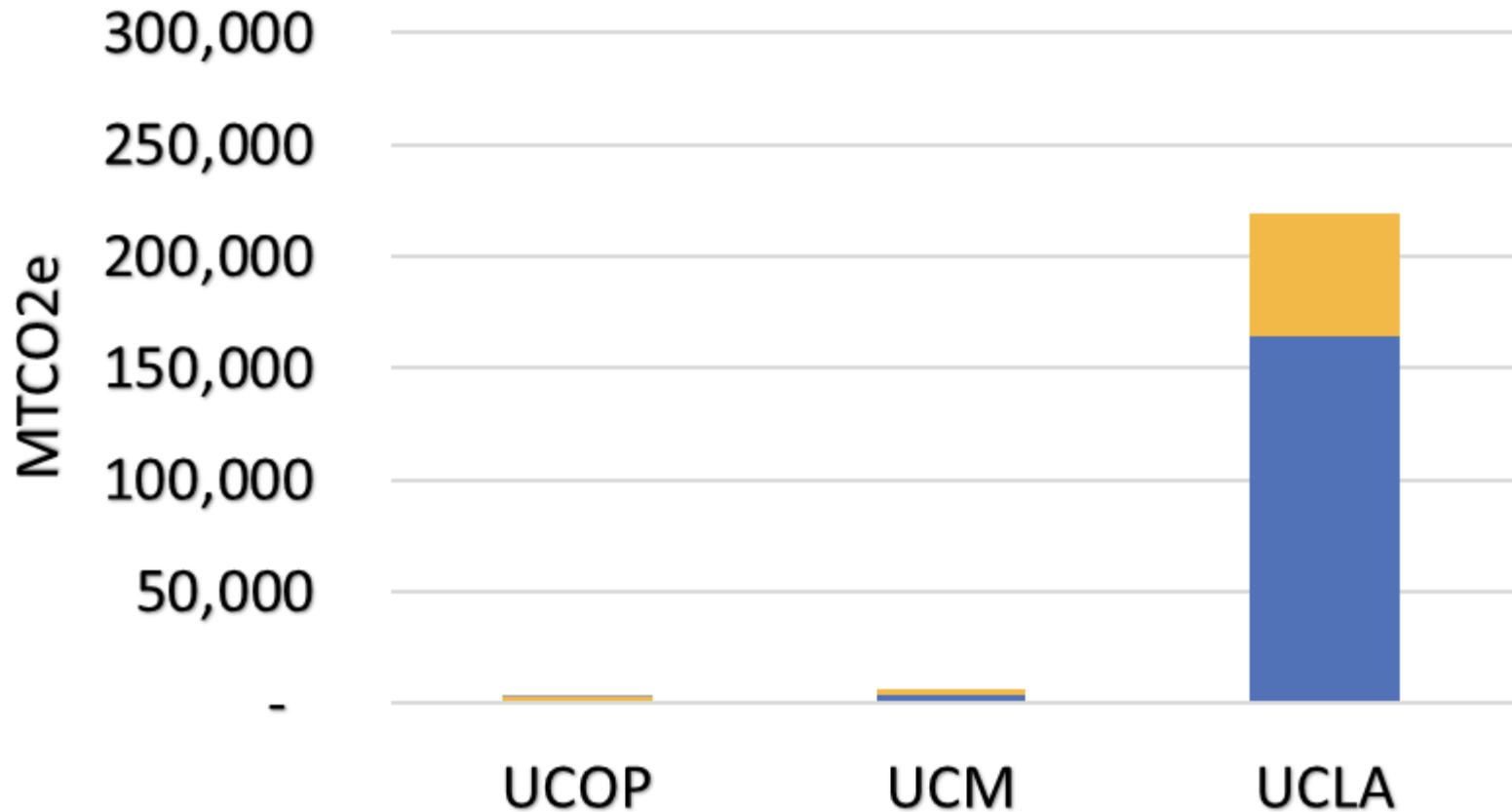


Key	
A	1111 Franklin 1111 Broadway Presidential Condo UC Press Kaiser Building 20th Street Blake House
H	UC Center Sac.
I	UC Path Center
J	UCDC
K	Casa de California

UCOP's Emissions by Building



UCOP's emissions are relatively small and 80% from purchased electricity

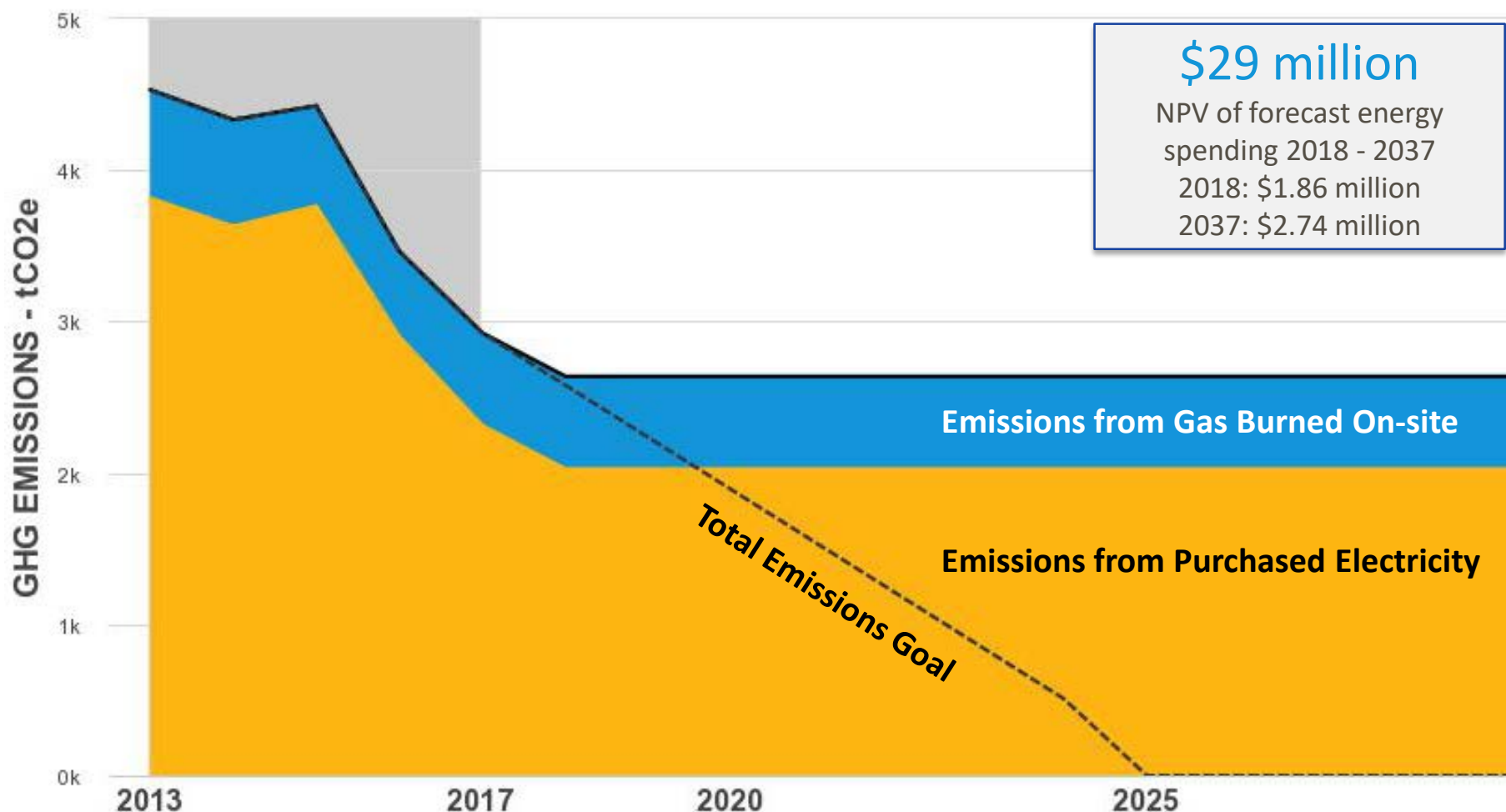


*UCOP's emissions total about
3,000 MTCO₂e per year*

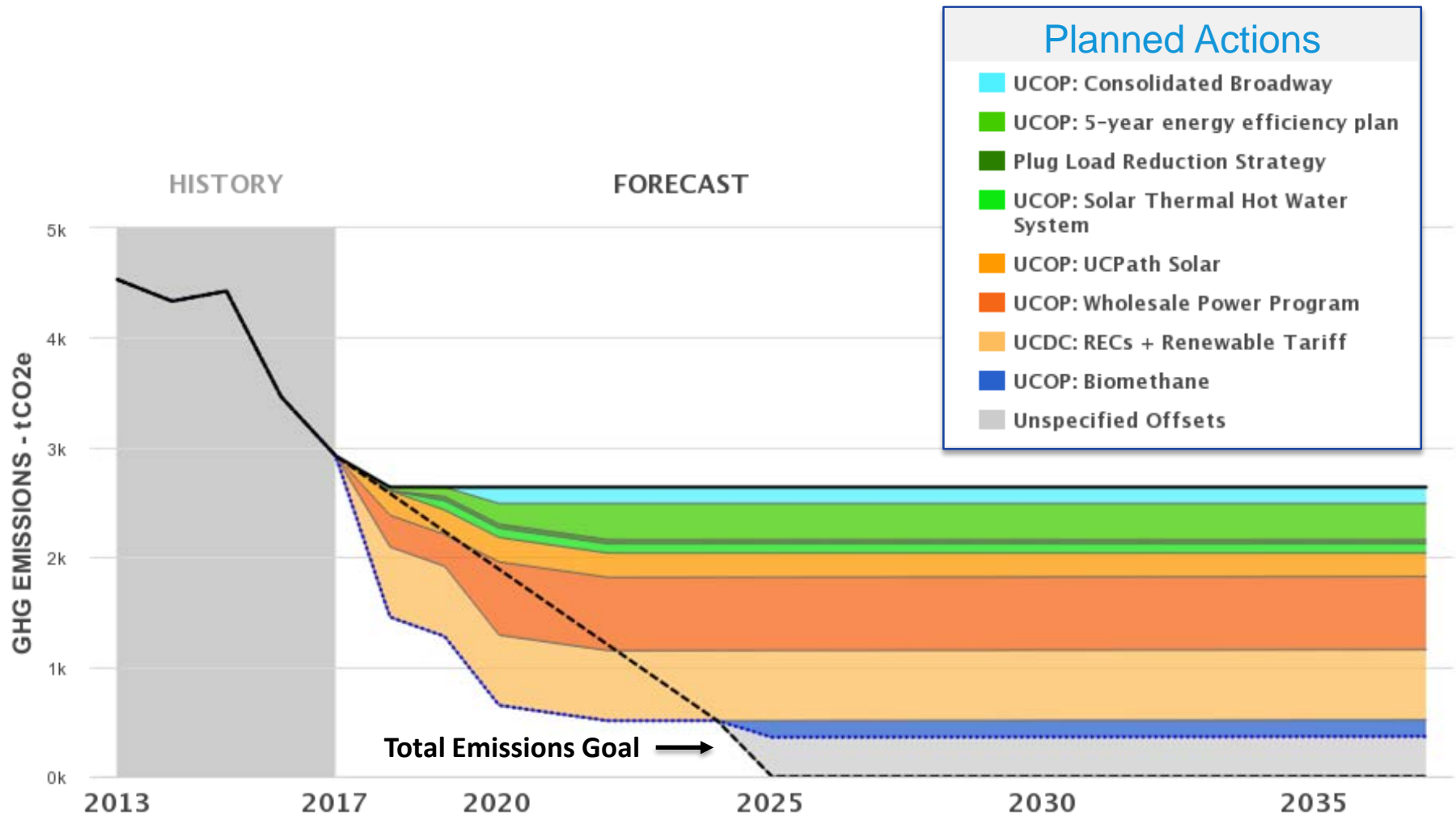
Business-as-usual Emissions and Costs

HISTORY

FORECAST

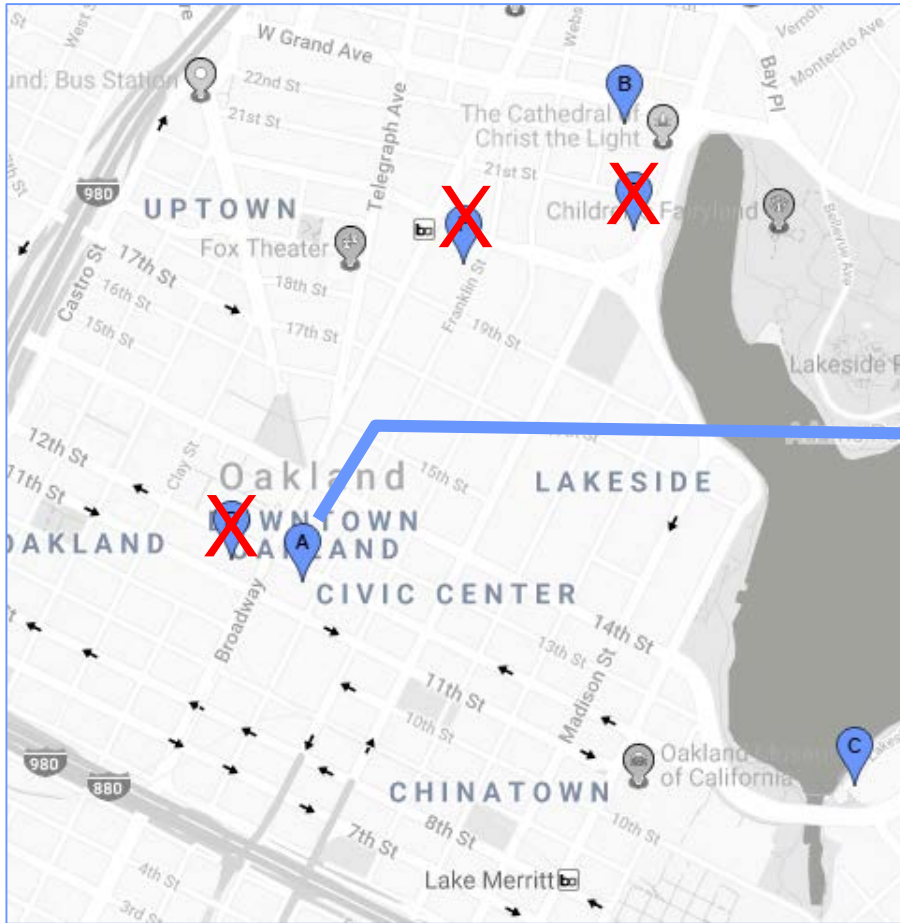


UCOP's Plan to Become Carbon Neutral



Our plans:

Reduce space by 23% and use UC-power



Move from three existing buildings...

...into new 1100 Broadway bldg.

Our actions:

Decreased energy use

Baseline Period: 2010 to 2012

49

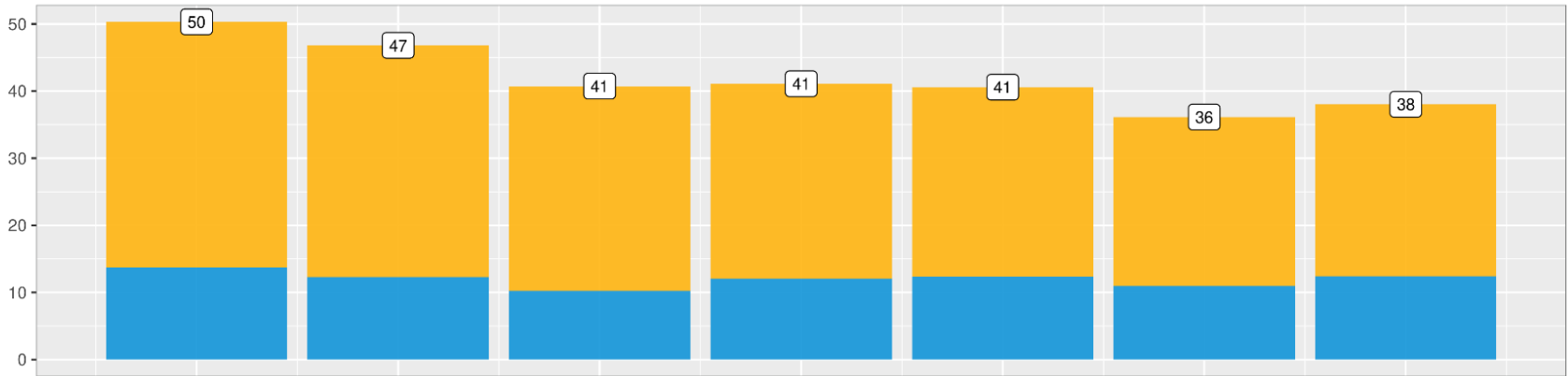
Current Reporting Period: 2015 to 2017

38

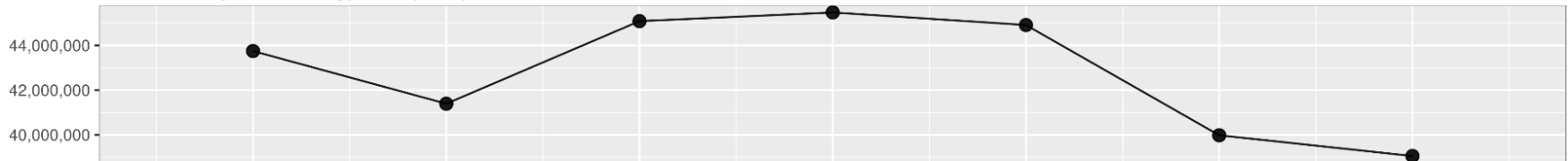
Annual Energy Savings:

4.7%

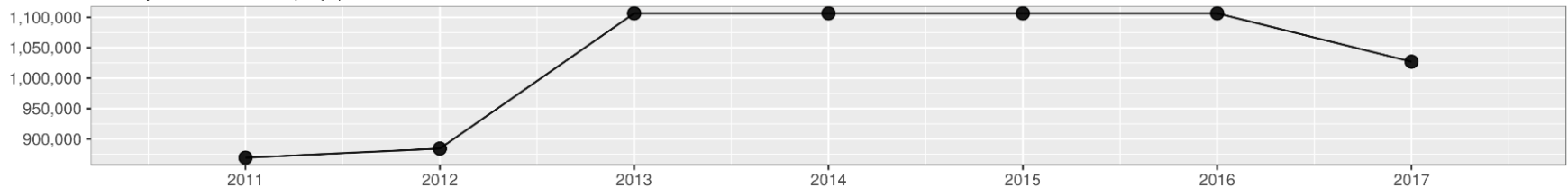
Growth and Weather Adjusted Energy Use Intensity (kBtu/Sqft)



Weather Adjusted Energy Use (kBtu)



Campus Built Area (Sqft)



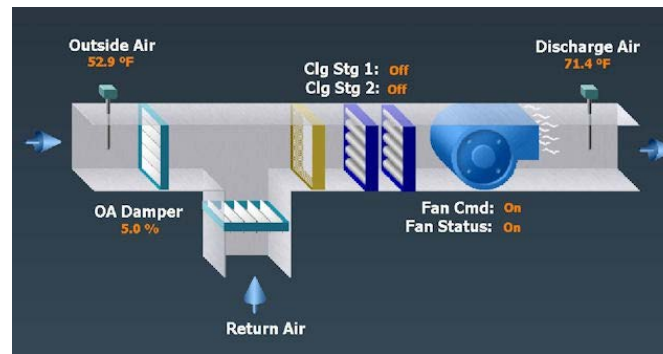
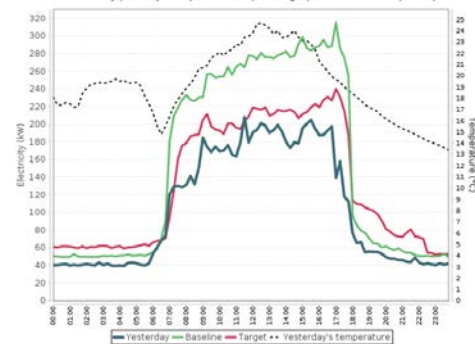
ELECTRIC GAS

Our plans:

Apply full-throttle energy efficiency



NMI Data for Yesterday (Tuesday 19 September 2017), the target profile and REP's expected profile.



Use tried and true actions: lighting retrofits and smarter HVAC

Our actions:

Install on-site renewable generation



New PV system at the UC Path Site in Riverside

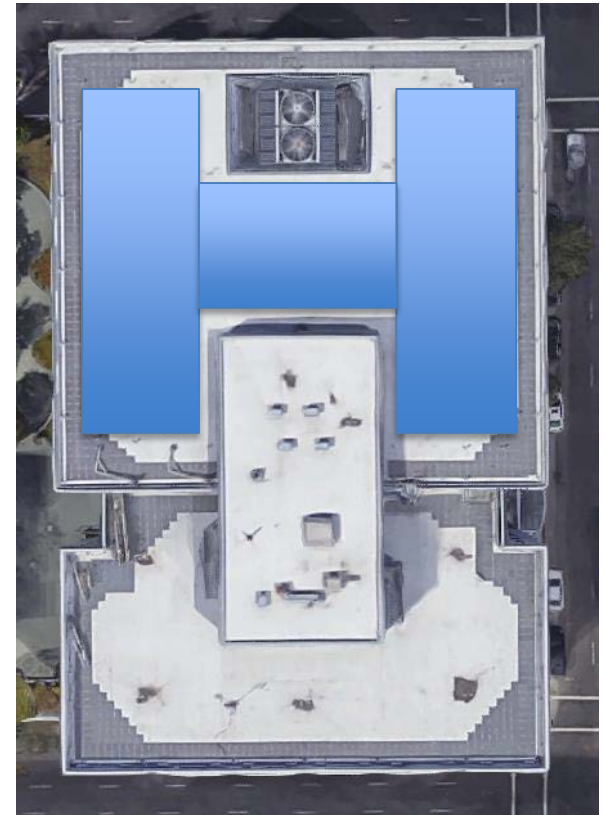
Our plans:

Add solar thermal to 1111 Franklin

Reducing gas use by 70%



Donated solar thermal panels



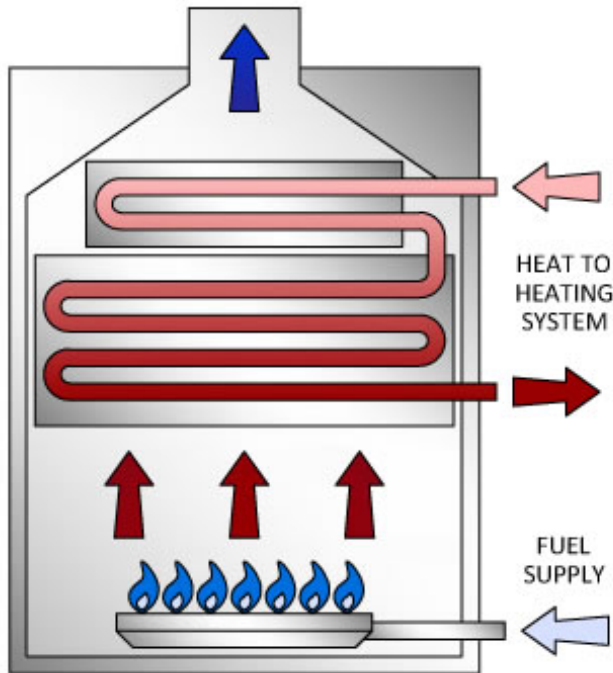
To be installed on roof

Our plans: Use green tariffs or new renewable power purchase agreements

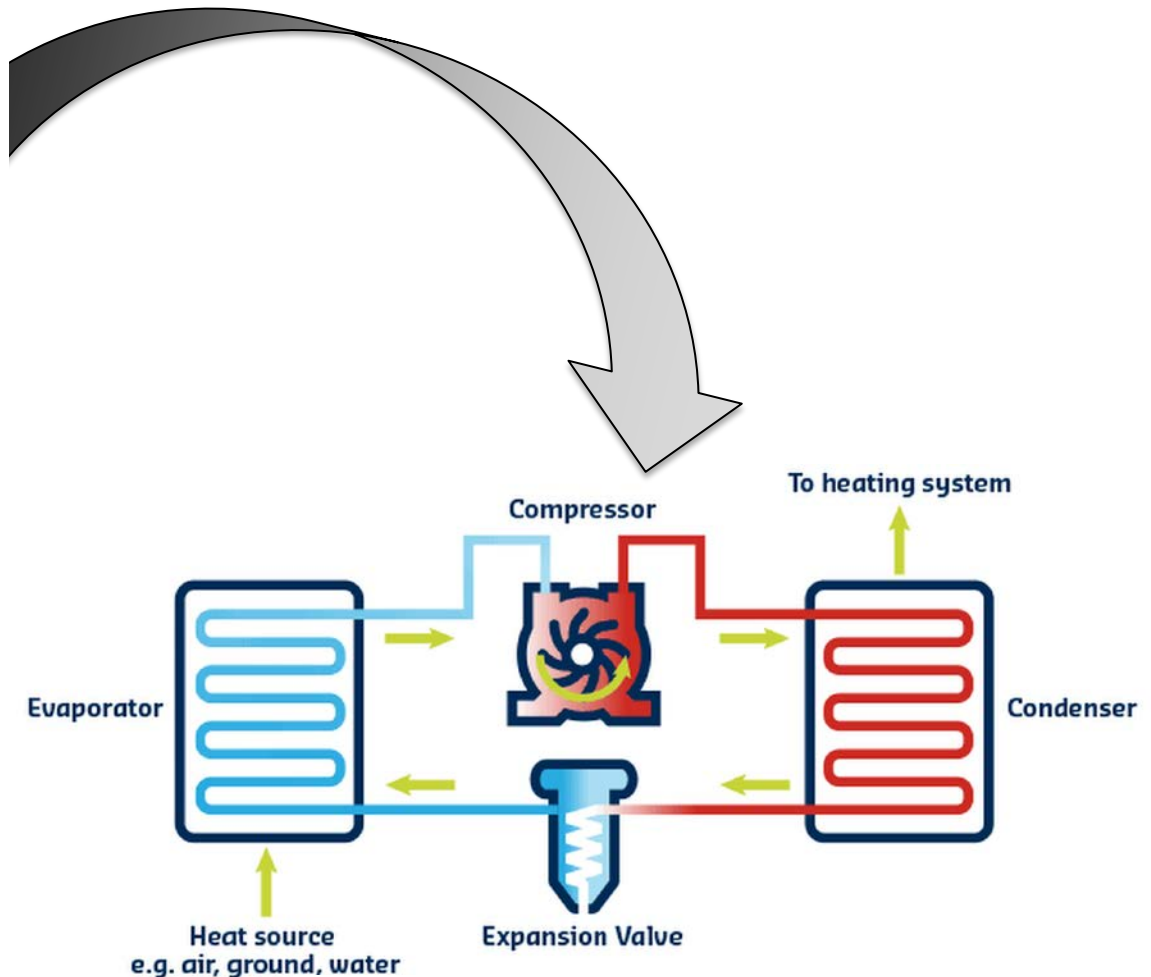


A load-matching renewable energy contract is in place for UCDC

Our plans: electrify over time

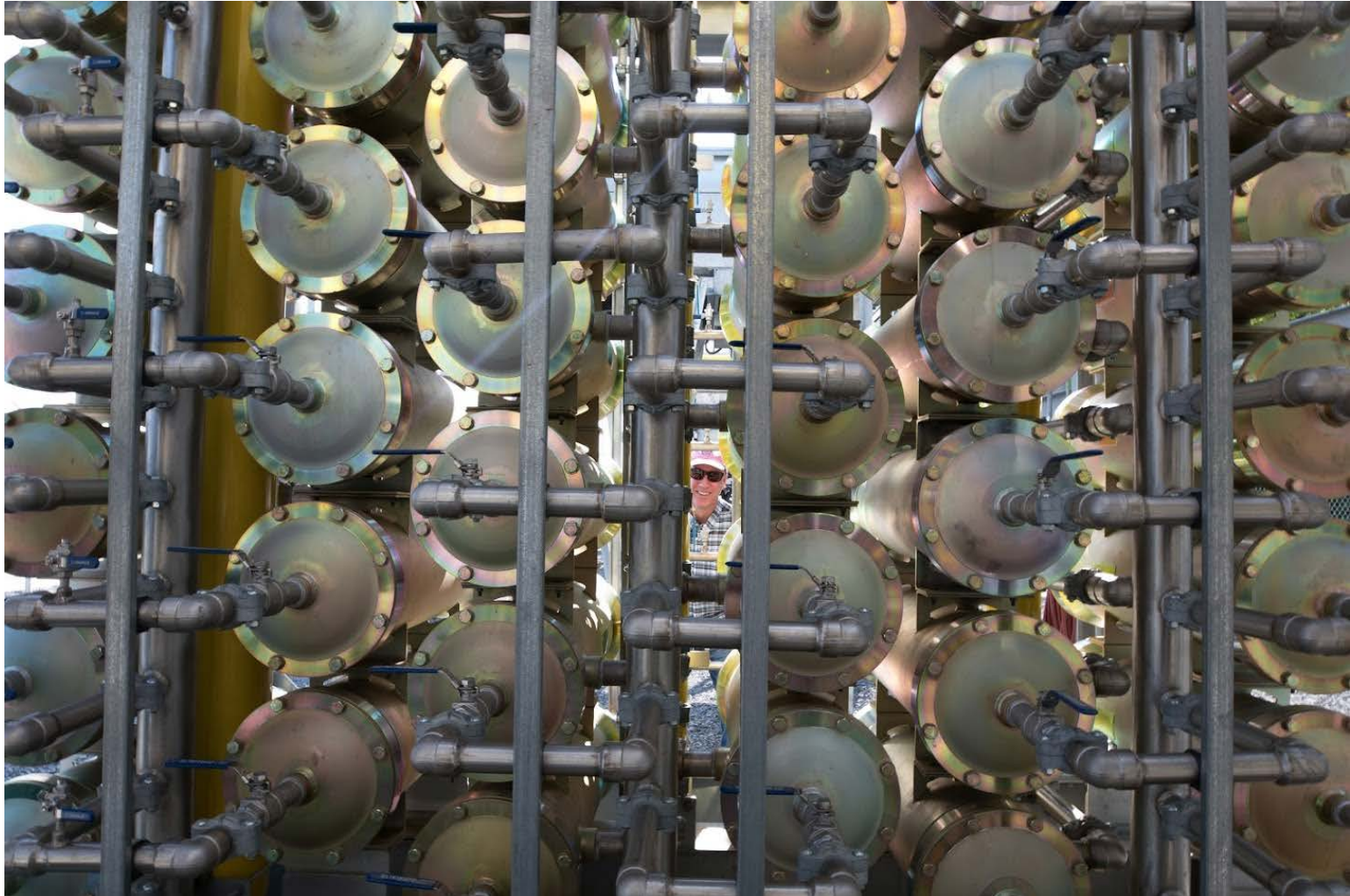


Gas-fired Boiler



Heat Pump

Our plans: Use 95% biogas



Membrane system to remove pollutants from landfill gas

Our plans:

Offset remaining emissions



Measuring methane releases from upgraded landfill

Strategies to Reduce Other Emissions



Become the UC leader in teleworking



**Establish an offset program
for air travel**



**Improve options for alternative
transportation**

What's this going to cost?

CapEx	Energy	Offsets	Total
\$0	\$29M	\$437k	\$29.4M

BUSINESS AS USUAL

CapEx	Energy	Offsets	Total
\$2M	\$22M	\$47k	\$24.5M

CARBON NEUTRALITY

**\$4.9M less
than BAU**

(NPV Costs
2018-2037)