

ET Summit 2019

Presented by



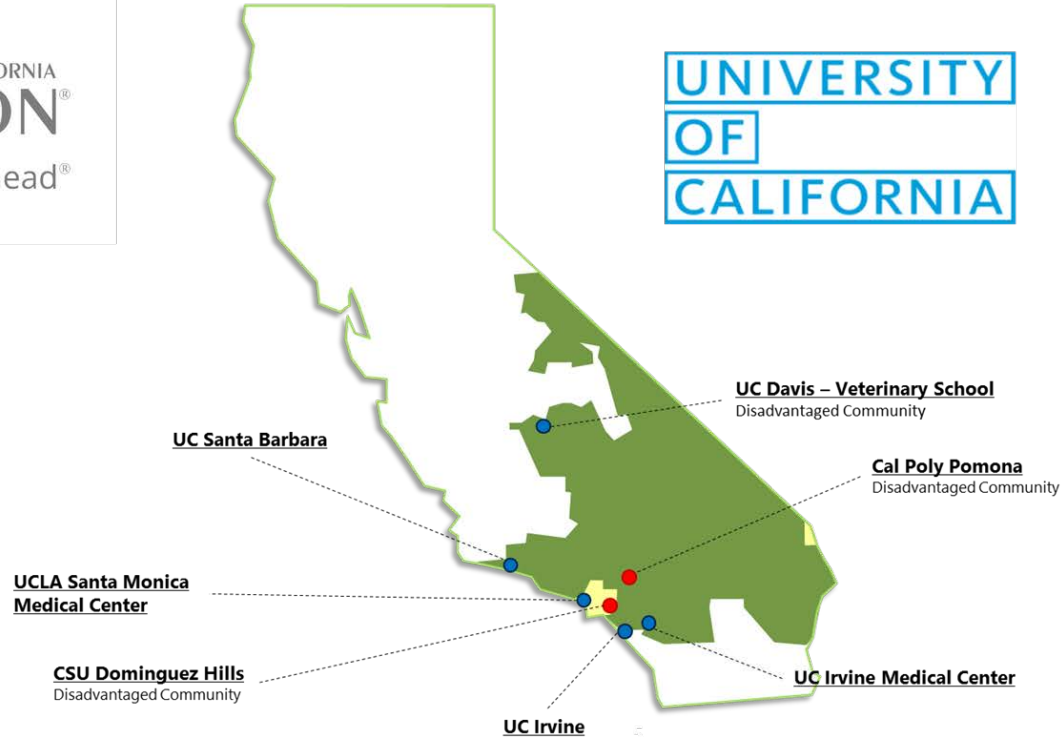
The Clean Energy Optimization Pilot (CEOP)

A customer-choice incentive program to reduce
behind-the-meter greenhouse gas emissions

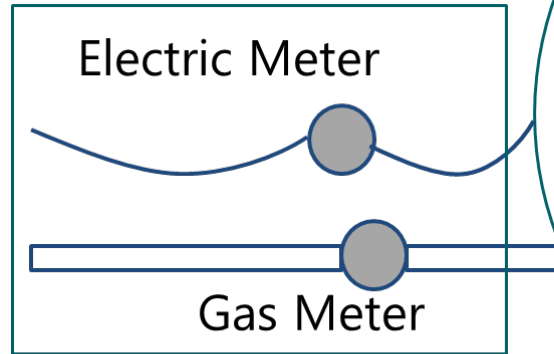
David Phillips

Associate Vice President, Energy & Sustainability
University of California, Office of the President

Clean Energy Optimization Pilot (CEOP) Partners



CEOP Provides Incentives for Behind-the-meter Actions

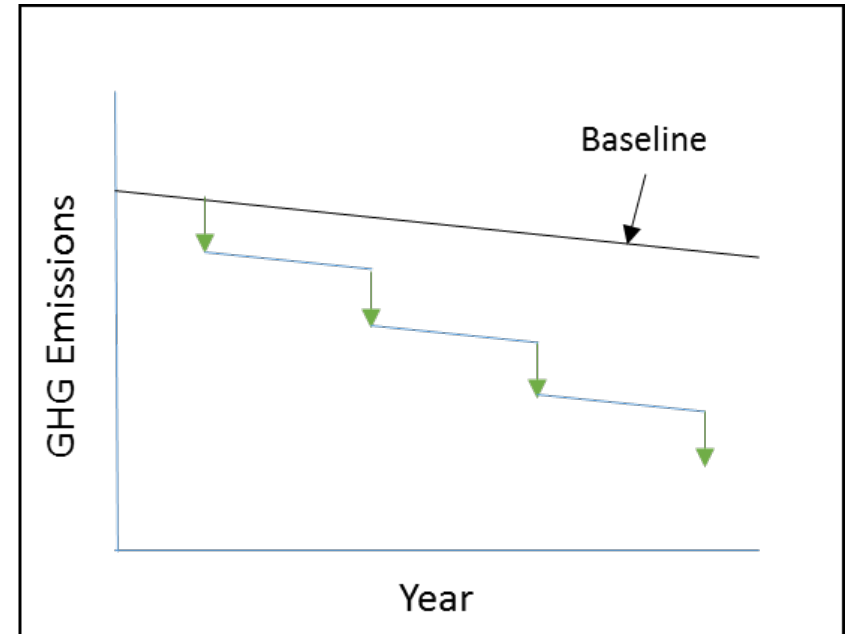


- Energy Efficiency
- Central Plant Efficiency
- Electrification
- On-site Renewables
- Smart Growth
- Clean Transportation
- Energy Storage / Demand Response



How the CEOP Incentive Works

- **Step 1: Annual Inputs**
 - All campus utility-provided electric and natural gas meters
- **Step 2: Adjustments**
 - Electricity used for Transportation
 - Weather and Square Footage
- **Step 3: Convert to GHG**
- **Step 4: Pay Incentives**
 - Based on: **Baseline GHG** trajectory (bold line); and **Actual Performance** (green arrows)



Explanation on Performance-based Incentives

$$\left(\begin{array}{c} \text{Net Campus} \\ \text{GHG} \\ \text{Performance} \\ \text{(tCO}_2\text{)} \end{array} \right) \times \left(\begin{array}{c} \text{GHG} \\ \text{Valuation} \\ \text{(\$ / tCO}_2\text{)} \end{array} \right) \times \left(\begin{array}{c} \text{Asset} \\ \text{Life} \end{array} \right) = \begin{array}{c} \text{Performance} \\ \text{Payment} \\ \text{(\$)} \end{array}$$

- Performance payments calculated annually based on net GHG emissions reductions
- Goal of performance payments is to pay for incremental and persistent GHG emissions reductions
- Funding source: Cap and Trade auction revenues

Clean Energy Optimization Pilot Summary

GOALS

- Pilot a new performance-based program to encourage customers to reduce GHG emissions
- Allow customers to choose and implement technology solutions that best suit their needs—including cutting-edge technology
- Minimize administrative complexity
- Evaluate program effectiveness and customer preferences for action

BENEFITS

- ✓ Aligns with California's aggressive GHG reduction goals using universities as learning laboratories
- ✓ Allows the flexibility to focus on all technologies—traditional or new
- ✓ Incentive payouts are structured to provide lasting GHG reductions
- ✓ Supports scalability of opportunities across multiple industry sectors

Resources

- david.phillips@ucop.edu
- <https://energized.edison.com/stories/fighting-climate-change-through-higher-education>
- <https://www.ucop.edu/carbon-neutrality-initiative/>
- [*Overcoming Barriers to Carbon Neutrality*](#)
- [*UC Strategies for Decarbonization: Replacing Natural Gas*](#)
- [*Annual Sustainability Report*](#)
- [*Sustainable Practices Policy*](#)
- [*Climate Lab*](#)

