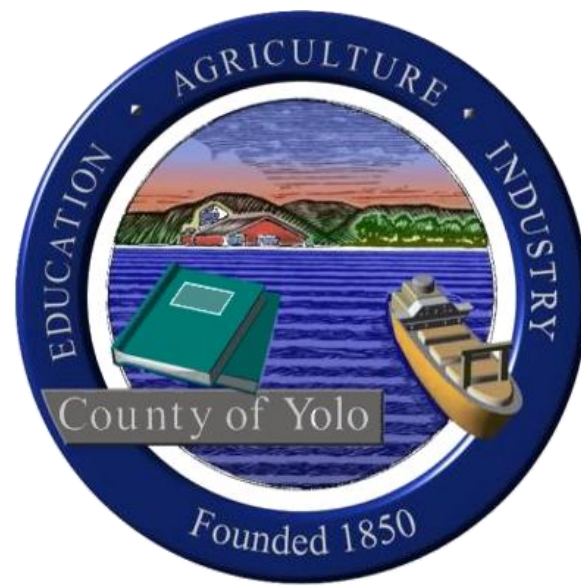




# YOLO COUNTY FOSSIL FUEL REMOVAL INVENTORY & FEASIBILITY STUDY

Yolo County, a rural agricultural county in California's Central Valley, has set an ambitious goal to achieve a **carbon-negative municipal footprint by 2030**. With aging public facilities, limited staff capacity, and competing funding needs, the County needed a clear, actionable roadmap to eliminate fossil fuel-powered equipment from its operations that is grounded in data, equity, and financial feasibility.

## STUDY AREA



## APPROACH

- Existing Conditions
- GHG Inventory
- Identify Opportunities
- Cost Benefit Evaluation
- Prioritization
- Monitoring

## OPPORTUNITIES TO REDUCE EMISSIONS

- Replace natural gas-based heating & cooling equipment, water heaters, laundry (dryers) and kitchen equipment
- Transition existing fleet to electric alternatives
- Protect and expand solar PV

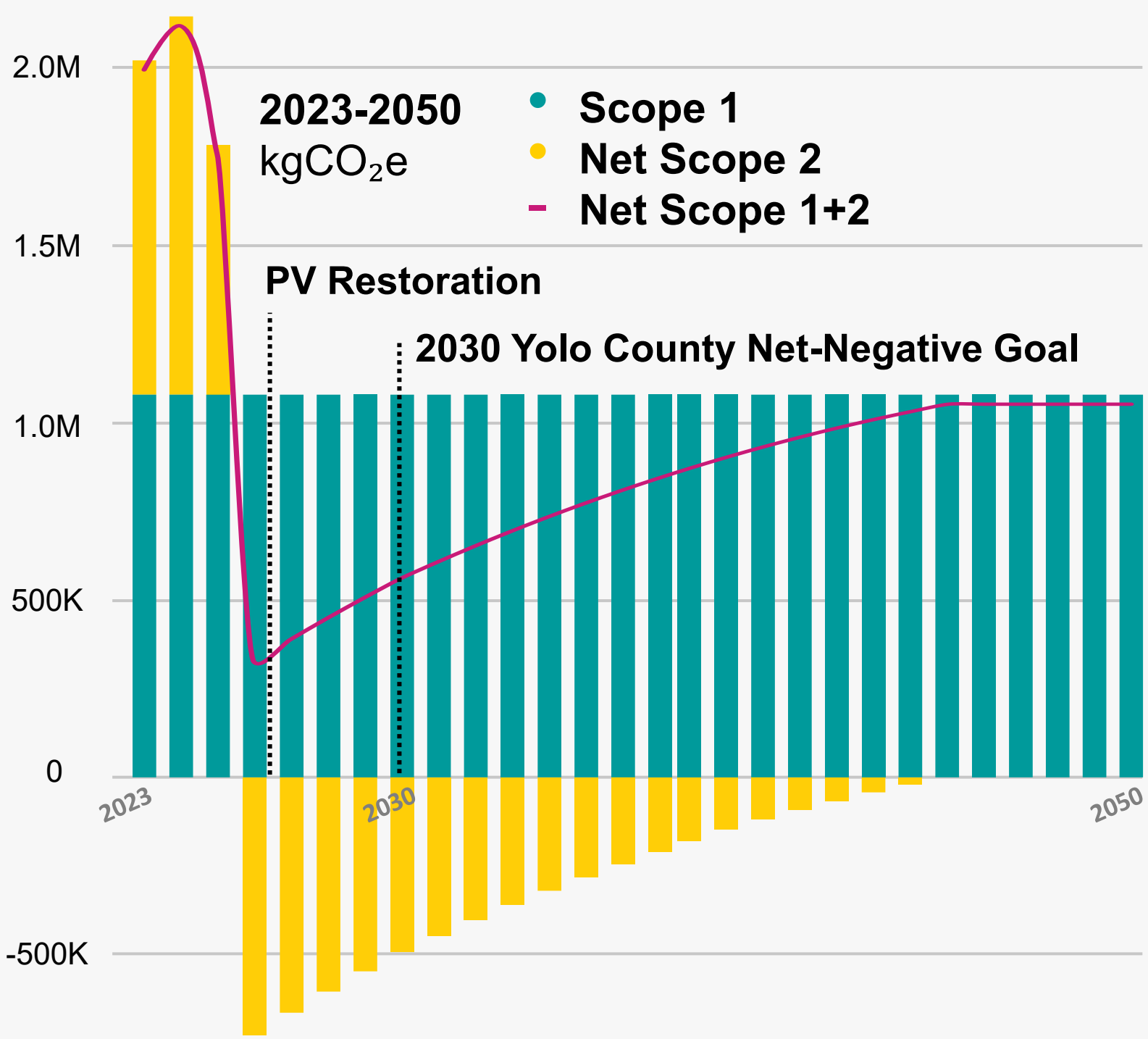
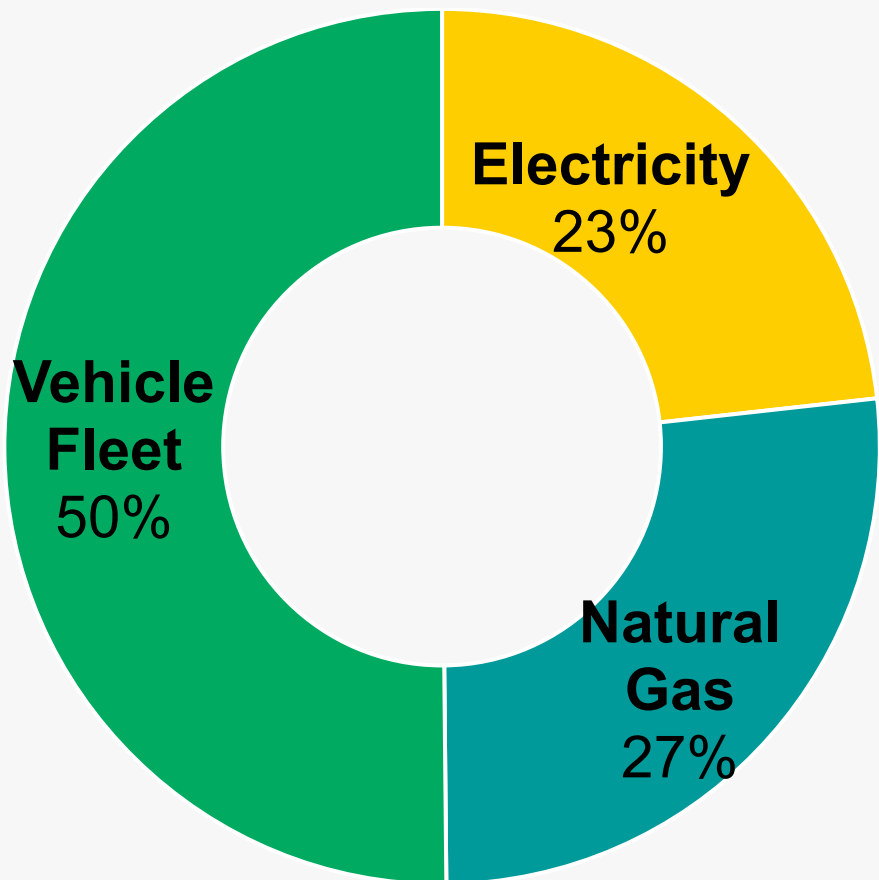
### Proposed Fossil Fuel Replacements



## 2023 EMISSIONS BASELINE

Based on 2023 data, Yolo County municipal operations emitted **approximately 4.1 million kgCO<sub>2</sub>e** across buildings and fleet operations

- Vehicle Fleet**  
2.1 million kgCO<sub>2</sub>e
- Net Electricity**  
1.0 million kgCO<sub>2</sub>e after accounting for existing solar PV generation
- Natural Gas**  
1.1 million kgCO<sub>2</sub>e



## RESULTS

| Implementation Scenario              | Description & Considerations                                                                                 | Meets 2030 net-zero goal? |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------|
| 1 End of Life Implementation         | Electrify systems only when existing equipment reaches end of useful life.                                   | No.                       |
| 2 Meet net-zero carbon emission goal | Implement projects based on prioritization ranking to achieve 2030 target but requires immediate investment. | Yes                       |
| 3 Budgeted Investment                | Implement projects based on prioritization ranking within available annual funding.                          | No                        |

### Project Prioritization Criteria

- Equipment Remaining Useful Life
- Equipment Refrigerant Type
- Financial Impact
- Building Priority
- Building Anticipated for Remodel
- Electrical Upgrade Required for building electrification
- Electrical Upgrade Required for EV
- Cost-to-Carbon Reduction Ratio

## ABOUT THIS STUDY

Supported by California's Strategic Growth Council (SGC) Climate Change Research Program, AECOM conducted a Fossil Fuel Removal Inventory and Feasibility Study **across 28 County-owned buildings and fleet operations**.

**33** Buildings Assessed  
**895K** Square Feet Analyzed  
**2030** Target Year For Carbon-Neg

## OBJECTIVES

- Develop a comprehensive inventory of fossil fuel-powered equipment.
- Assess replacement feasibility and GHG reduction potential.
- Prioritize projects that are grant-ready and actionable.
- Support broader implementation of the Yolo County 2020 Climate Action and Adaptation Plan (CAAP).

## KEY TAKEAWAYS

- Reaching carbon-negative by 2030 requires accelerated investment.
- Secure external funding like grants, Green Revolving funds, and financing mechanisms to reduce direct County capital costs and lower total cost of ownership.
- Use the dashboard to plan, sequence, and track performance of electrification projects.
- Regularly maintain and monitor existing PV and consider expansion.

## Yolo County Municipal Portfolio Fossil Fuel Removal Dashboard

