



Challenges & Lessons from Increasing Mercury Thermostat Recycling in California

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Outline

Mercury Thermostats Collection

1. Background on Mercury Thermostats
2. Challenges of Meeting Collection Requirements
3. State Outreach Program and Pilot Programs
4. Opportunities for HHW Involvement



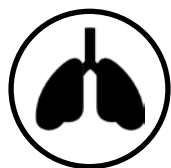
Mercury Thermostats

Background

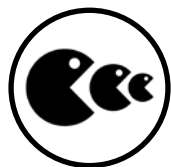
Facts About Mercury



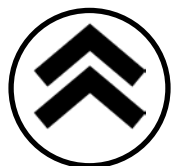
Poses a severe health & environmental threat



200,000-460,000 infants are born into US each year with mercury levels associated with the loss of IQ



Fish ingestion is the primary exposure route for most Americans



Toxic via inhalation

Safe



Hazardous



**Mercury thermostats contain 1,000x
more mercury than a CFL bulb**



Manufacturer use of mercury in thermostats declined from 12,000kg annually to zero in less than six years





Challenges

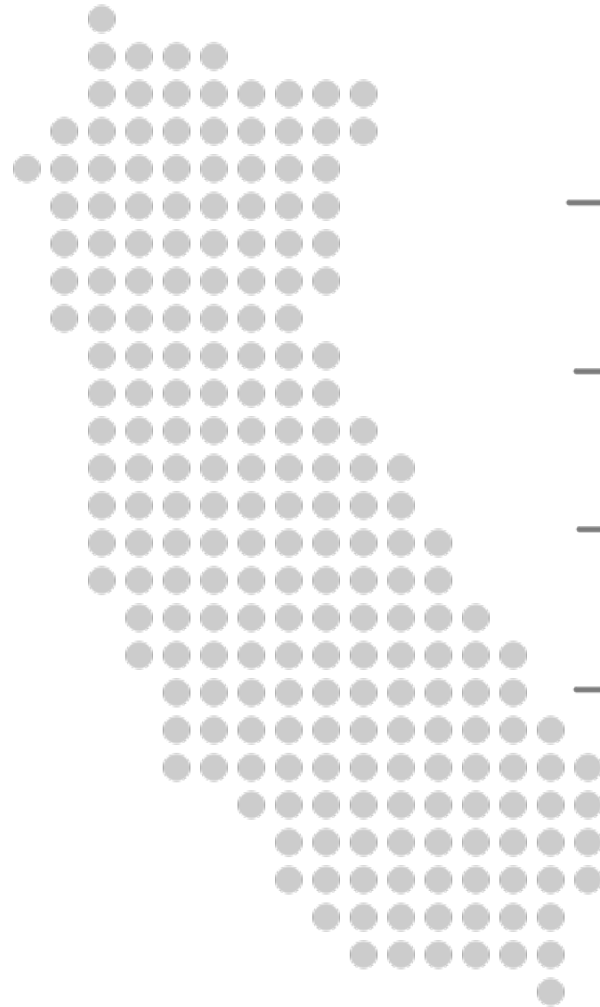
Meeting Collection Requirements

Thermostat Recycling Corporation (TRC)



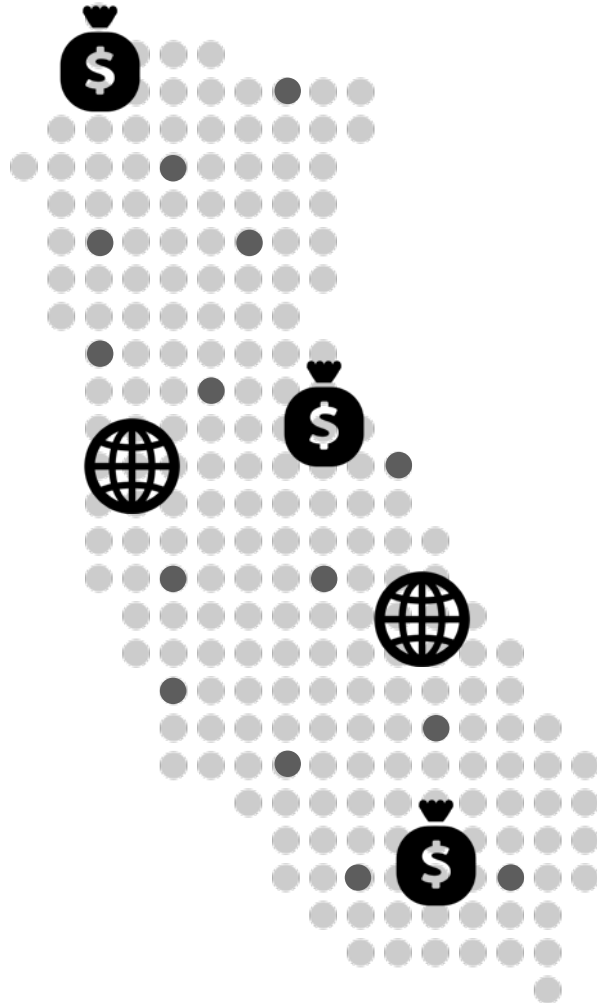
Challenges of Developing a Statewide Program

California



- Collection rates have declined steadily since 2013
- Unique landscape: large and diverse
- Many target audiences
- Providing cost-effective, sustained support

Two-Pronged Program



1. Create a comprehensive statewide outreach program for 14 target audiences
2. Develop localized, concentrated pilot efforts



Outreach Plan Framework

Connecting with our target audiences

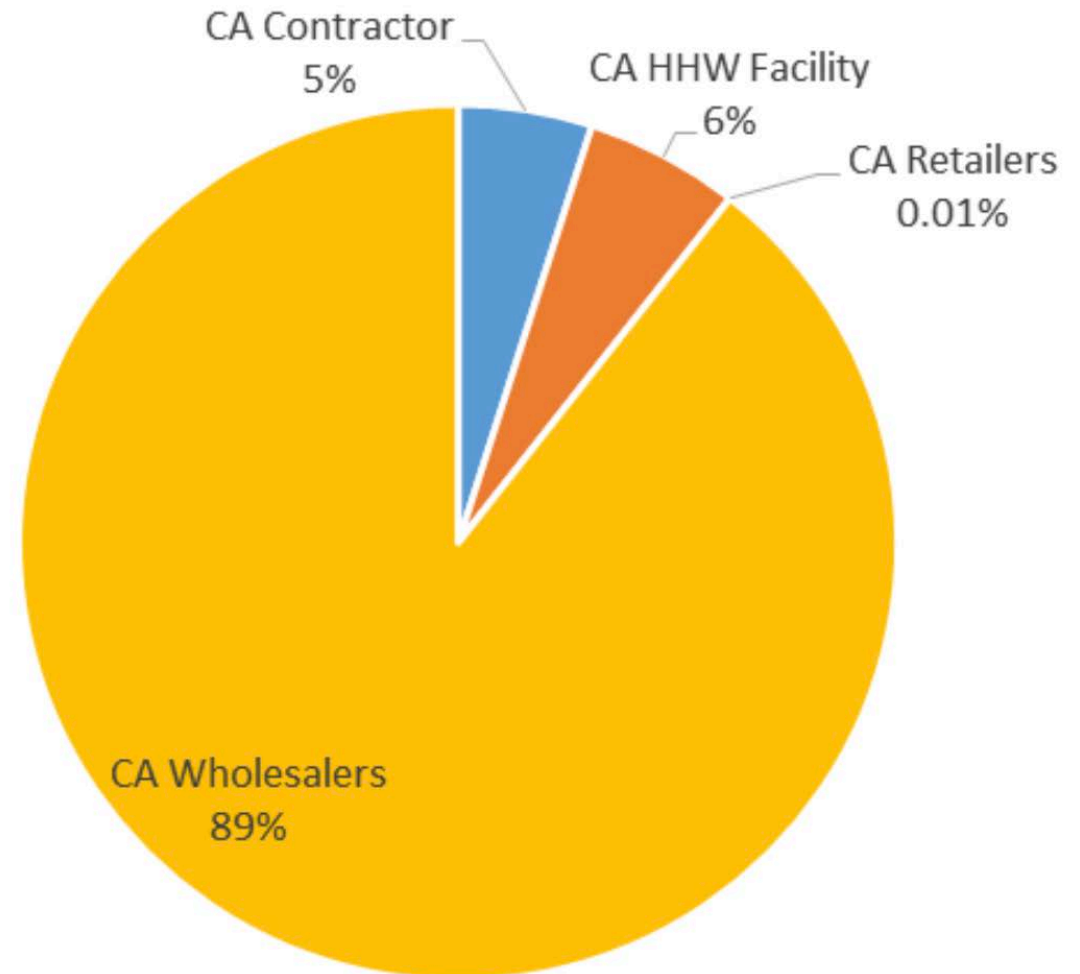
Program Objectives

1. Meet the requirements and deadlines of the Consent Order
2. Increase collection of mercury thermostats
3. Increase collection sites
4. Report what works



Thermostats Collected by Location Type 2015

- **18,260 collected last year**
 - Wholesalers (89%)
 - HHWs facilities (6%)
 - Contractors (5%)
 - Retailers (0.01%)



Phased Approach

2016

2017

| October | November | December | January | February | March | April | May | June | July | August |

- HVAC contractors
- General contractors
- Demolition contractors
- Consumers
- HHW programs
- Retail
- Wholesalers

- Utility Companies
- School Districts
- University and colleges
- Local building departments

- Multi-family
- Commercial
- Hotel/motel



Pilot Project Framework

Testing ideas to make a bigger impact

Pilot Program Objective

1. Assess effectiveness of **monetary** and **nonmonetary** incentives to increase program participants and overall collection rates.
2. Provide data-based findings to enhance TRC's ongoing outreach efforts throughout the state.

Monetary Incentives

- Target three locations

- Northern CA
- Central CA
- Southern CA

- Incentives



- Retailers (immediate)



- HHW & Wholesalers (delayed)



Retail In-Store Credit Pilot



- One Year, 9 Ace Hardware Stores
- **Test:** \$5, \$10 in-store credit
 - Levels of staff support (trainings, follow up calls/visits)
 - Vary types of community outreach & messaging
- **Pilot Design:** Based on Vermont Pilot Program, 2007



HHW Mail-in-Rebate Pilot

- One year, 3 HHW Facilities
- **Test:** \$10/mercury thermostat mail-in-rebate
- **Pilot Design:** New pilot to increase HHW participation

Wholesaler Bin Return Pilot



- One year, 3 Wholesaler Branches
- **Test:** \$100 mail-in rebate/bin returned
 - For bins with less than 40 thermostats, pro-rated at \$2.50 each
- **Pilot Design:** Increase bin return rate (Wholesaler rate of bin return was 55% last year)

Non-Monetary Incentives

- Differing messaging to influence action
- A/B test
 - *Google ads*
 - *Facebook ads*





How to Participate

HHWs—What's In It For Me?



Sustainable funding



Cut costs while increasing waste diversion



Education and Outreach



Free data availability

HHWs—What Actions Should I Take Today?

- ✓ Directly participate in the program as a collection site
- ✓ Order educational and outreach materials for free
- ✓ Form a partnership and becoming more involved with TRC
- ✓ Provide input about HHW perspectives on the program
- ✓ Post our site locator on your website: RecycleHomeThermostats.org

Questions?

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