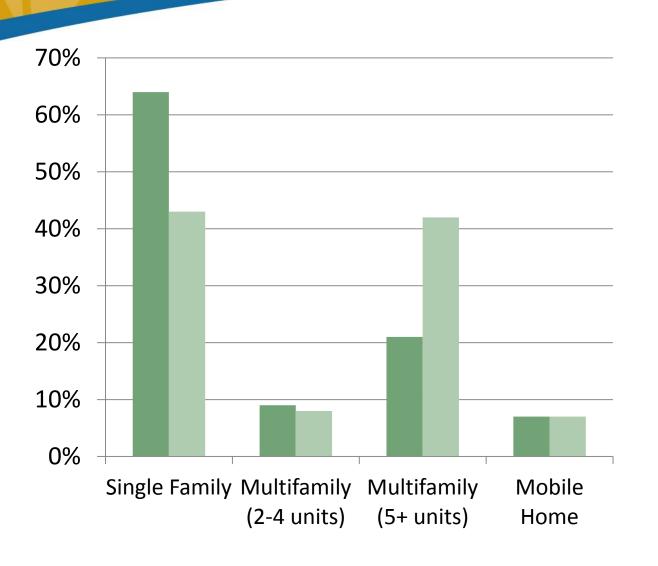
Energy Efficiency in Existing Multifamily

Sector Overview Rebates & Resources



Distribution of CA Households by Dwelling Type

(Source: CPUC Strategic Plan, 2008)

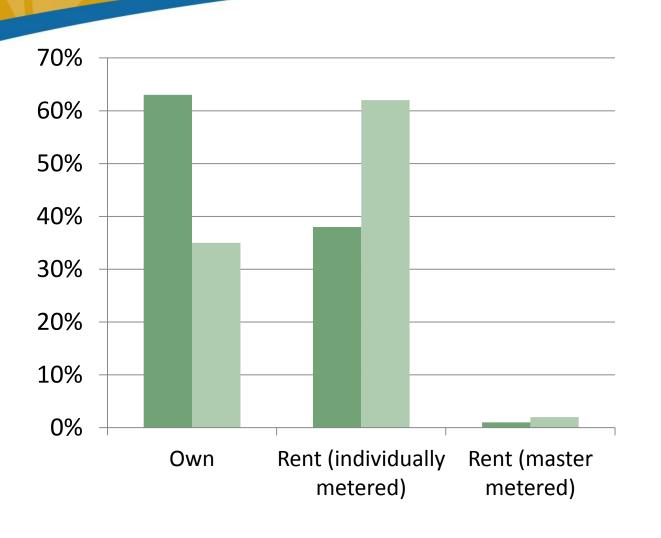


- % of all CA households
- % of lowincome households



Distribution of CA Households by Ownership

(Source: CPUC Strategic Plan, 2008)

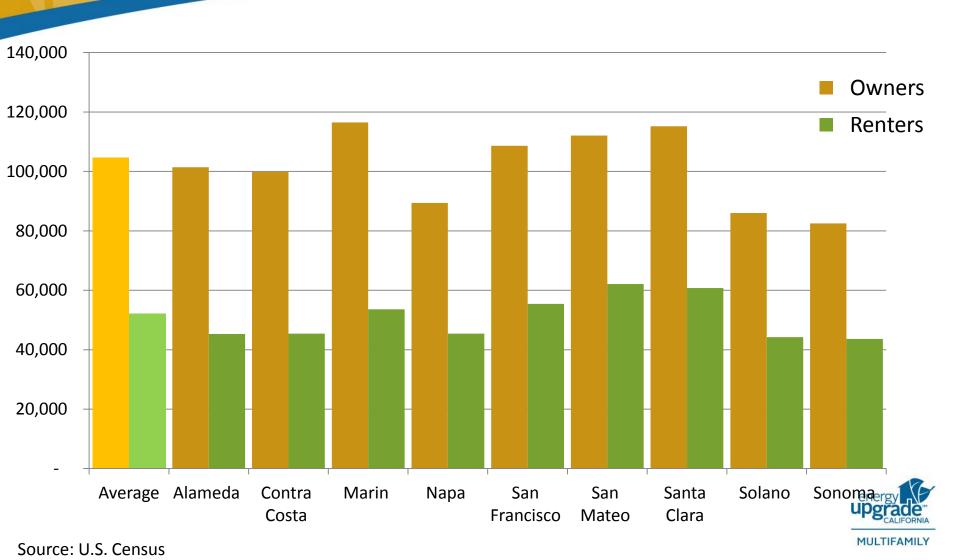


■ % of all CA households

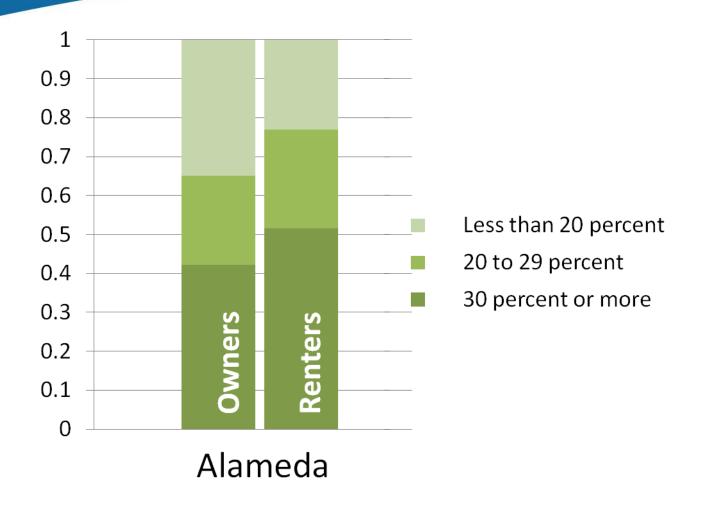
% of lowincome households



Average HH income - Owner vs. Renter



% of household income on housing





Source: U.S. Census

Multifamily Challenges

- Diverse building types & ownership structures
 - Requires customized approach
- Split incentives
 - Rating system and disclosure can help overcome
- Poor access to utility data
 - Whole building aggregated data needed

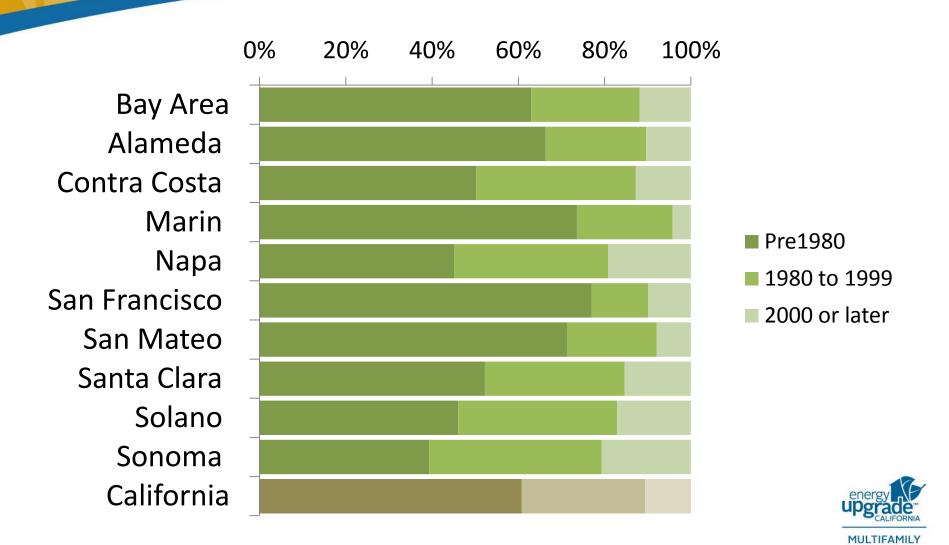


Multifamily Opportunities

- Economies of Scale
- Majority built before energy code
- Trigger events



Multifamily (5+) Vintages



Multifamily Trigger Events

Tune-up/ Spruce-up

- Ongoing maintenance
- Commissioning

Rehab

- Comprehensive rehab
- Extensive opportunities

Replacement

- Equipment failure
- Equipment upgrade

Retrofits

Partial building retrofit

Unit Turnover

- In-unit opportunities
- Green Unit Turn specs



Multifamily Whole Building Approach

- HVAC
- Domestic Hot Water
- Enclosure
- Lighting
- Appliances
- Pools
- Related Measures:
 - Water
 - Renewable energy
 - Green building upgrades

- Multiple Measures
- Performance Based (% energy savings)



Ratepayer Funded Multifamily Programs

| Program Name | In-Unit | Common Area | Central Systems | Solar |
|---|--------------|----------------|--------------------|--------------|
| Bay Area Multifamily Building Enhancements | ✓ | ✓ | ✓ | |
| PG&E Whole Building | \checkmark | \checkmark | \checkmark | |
| PG&E Multifamily Energy Efficiency Rebates | ✓ | ✓ | ✓ | |
| MCE Multifamily | \checkmark | \checkmark | \checkmark | |
| PG&E Energy Savings Assistance | \checkmark | | | |
| PG&E Mid-Income Direct Install | \checkmark | | | |
| Local Energy Watch | | ✓ | | √ |
| California Solar Initiative | | | | \checkmark |

Ratepayer Funded Financing Pilots

| Program Name | Repayment Mechanism | Limitations |
|--|------------------------|---|
| On-bill Financing | PG&E | Commercial meters \$100K; 5 yr payback |
| On-bill Repayment | PG&E | Pilot for master metered affordable housing |
| Pay As You Save | Water utility | Limited locations |
| Property Assessed Clean Energy | Property tax | Pays property taxes |
| Bay Area Multifamily Low- Interest Loan | Traditional loan | Lender must agree |

Bay Area Regional Energy Network

2 RENs: Bay Area & SoCal

- Collaboration of 9 counties
- Approved in Nov 2012
- Ratepayer funded programs
- Builds on stimulus funded program successes





Bay Area Multifamily Building Enhancements

Cash Rebates

- Whole-building rebates at \$750 per dwelling unit
- In-unit and common area improvements eligible
- Choose your own contractors

Free Energy Consulting

- Free energy usage analysis and site visit
- One-stop-shop to connect with incentives & programs

Low-interest Financing

- Effectively brings interest rate down by half
- Open lender market; requires lender participation



Bay Area Multifamily Building Enhancements

Eligibility Criteria

- 5+ attached dwelling units
- Located in 9 county Bay Area
- PG&E service
- Rebate upgrade scope to be approved through free consulting
 - Must save 10% or more on whole building basis
 - Must install multiple improvements





Contact Us

Bay Area Regional Energy Network Multifamily Programs

Multifamily.EnergyUpgradeCA.org multifamily@BayREN.org

