

ELECTRIFICATION

MHP OIR Workshop #2

March 20-21, 2019

MHP Resident Analysis - 2014

Demographics – SoCalGas

- » At least 66% of residents are 65+ years of age
- » At least 69% of residents have an income of \$50K or less
- » 64% of residents are female

Age	
Mean Age	71
Under 44	5%
45-54	6%
55-64	18%
65-74	25%
75-84	28%
85+	13%
Prefer not to say	5%

Income	
Less than \$25,000	46%
\$25,000 to \$50,000	23%
\$50,000 or more	13%
Not sure	5%
Prefer not to say	13%

Gender	
Male	36%
Female	64%

MHP Resident Analysis - 2014

Demographics – SDG&E

- » 76% of residents are 65+ years of age
- » 69% of residents have an income of \$50K or less
- » 74% of residents are female

Age	
Under 44	7%
45-54	4%
55-64	13%
65-74	30%
75-84	32%
85+	14%

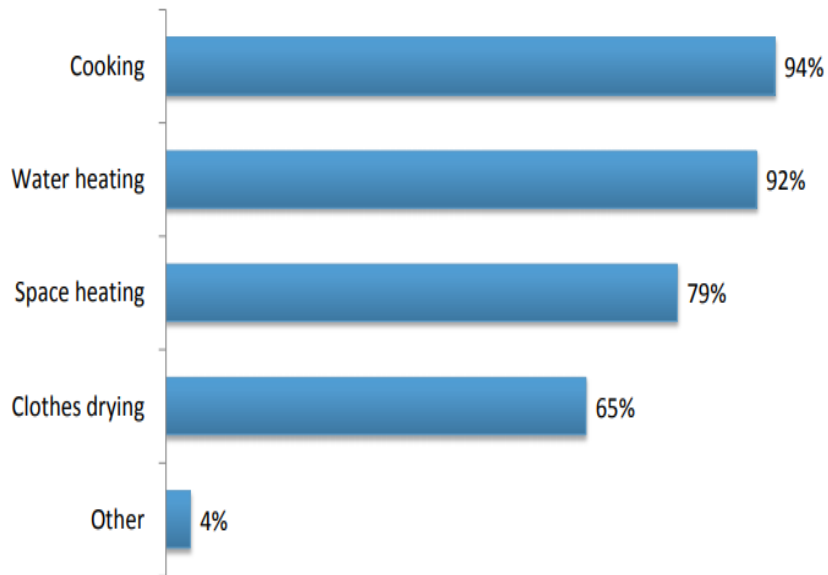
Income	
Less than \$25,000	39%
\$25,000 to \$50,000	30%
\$50,000 or more	16%

Gender	
Male	26%
Female	74%

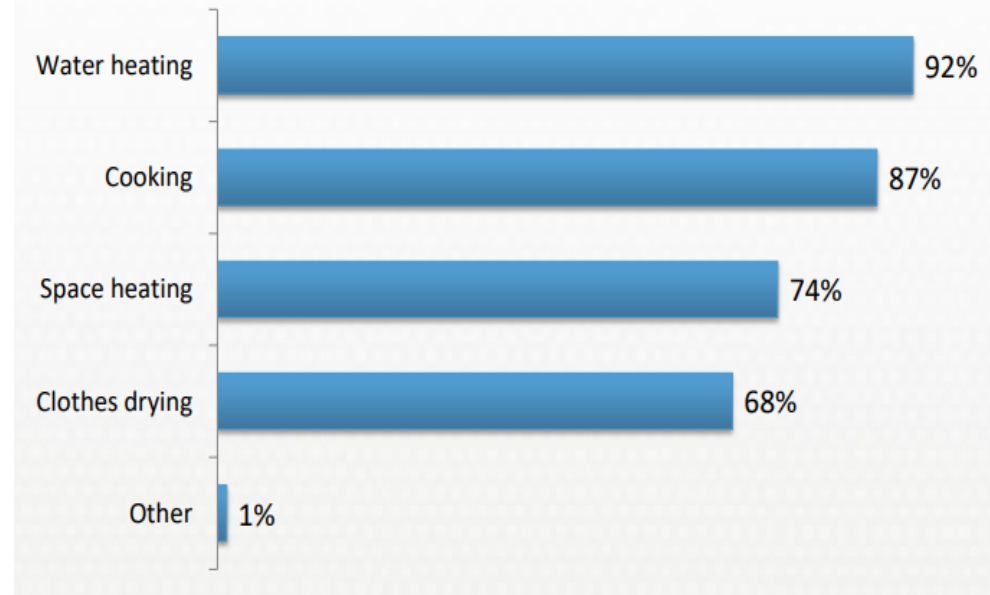
MHP Resident Analysis - 2014

Natural Gas Usage by MHP Residents

SoCalGas



SDG&E



Annual Utility Bill Increases

Home Design	Location	Annual Utility Bills		Annual Utility Bill Increases	
		Home with Natural Gas Appliances	Home with Electrical Appliances	\$	%
2100 SF	Bakersfield	\$1,728	\$2,052	\$324	19%
2100 SF	Riverside	\$1,288	\$1,476	\$189	15%
2100 SF	Compton	\$1,042	\$1,165	\$123	12%

Note: Results represent energy consumption for all major appliances. Annual utility bill for natural gas home represents combined natural gas and electric utility bills.

The utility bill analysis reflects annual average electricity rates, and does not analyze time-of-use or multi-tiered utility rate structures that have higher prices during peak periods

Source: March 2018 Navigant Consulting, Inc. Electrification Study for Calif . Building Industry Association

Electrification Challenges

- » Program Viability Depends on ***Resident Support***
 - Residents that object to electrifying the MHPs could hold up conversions indefinitely, increasing costs and making conversions unsuccessful.
 - Homes that are rented would require the approval of home owner to make modifications or replacements to home adding complications and delays.
 - HCD is likely to require a separate permit and inspection for modifications to the mobile home
 - Obtaining 100% agreement from all MHP Residents to convert all gas appliances will be unlikely
 - Less than 100% participation from residents would require maintaining legacy sub-metered gas service to residents that declined to convert their mobile homes;
 - Maintaining aging legacy gas system that would need to remain in service, which undermines the goals of the MHP program of removing the legacy gas system

Electrification Challenges

- » Program Viability Depends on **Beyond the Meter (BTM) Contractor Participation**
 - Having the participation of broad range of qualified BTM contractors is a critical part of the success the MHP program, changes that deter BTM contractor participation will impact the success and costs of the Program.
 - BTM contractors have expressed reluctance to perform the extensive remodeling and rewiring work inside the home that would be required by replacing gas appliances with electric

Electrification Challenges

- » Program Viability Depends on ***Mobilehome Park Owner Participation***
 - The program must appeal to mobilehome park owners in order to ensure successful conversions of projects
 - During the initial application period in 2015, approximately 25% of mobilehome park owners elected not to submit the CPUC Form of Intent to be considered in SED's prioritized list.
 - Another 25% of mobilehome park owners on SED's list subsequently declined to participate in MHP Program
 - Requiring mobilehome park owners to persuade all their residents to convert to all-electric homes and limiting their MHP to electric-only homes creates additional challenges and impediments to participation

Differences from San Joaquin Valley (SJV) Pilot Project

- » Unlike SJV residents, MHP residents currently have natural gas; electrification would be taking away an energy source they currently use and value
- » Mobile homes are different from fixed structures and appliance changeouts can be more challenging and costly
- » Similar challenge as SJV would exist such as unknown conditions inside each mobilehome

SJV Lessons Learned

- » Community outreach and workshops are key to identify and address resident concerns
 - In SJV, examples of residents' concerns are electric reliability (power outages) and high electric bills, and tenant/owner incentive issues.
- » Home Energy Bill Impact Concerns
 - Bill impact difficult to estimate in SJV – propane to gas/electric conversions
 - Final decision allowed \$500/household subsidy over 3 years
 - Parties and residents concerned this is not enough bill protection for residents
- » Pilot Construction has not yet begun, lessons learned are based on planning analysis only
 - Retrofit viability of homes still a notable concern
 - Risks of cost overruns or liability risks to ensure homes are up to code
 - Bill impact unknown
 - Consumer acceptance of electric vs. gas appliances unknown

Overlap with Other Proceedings

» Building Decarbonization OIR – R.19-01-011

- Building decarbonization policy in development
 - Electrification is not the only pathway, several parties also noted the potential for renewable gas to play a role in building decarbonization
- Pilot Program for areas damaged by wildfires
 - CPUC should consider whether a MHP electrification pilot would generate new learnings compared to the SJV and Building Decarbonization pilots

Criteria for Consideration

- » Consumer preference
- » Out-of-pocket costs for the consumer and MHP owner
- » Feasibility of entering homes to complete work (residents denying access, not reachable, etc.)
- » Potential for 100% resident participation in electrification
- » Retrofit viability, costs, and who will pay for the retrofits
- » Rate & bill impacts
- » Effect on participation in the MHP Program
- » Impact on achieving the CPUC's objective of enhancing safety and reliability at mobilehome park communities
- » Given the uncertainties with electrification, rolling it out to our most vulnerable customers may be risky