

LIFT Pilot Multifamily Barriers and Metrics Table

| Problem Statement   | Market Barriers  | Desired Effects/2-Year Vision  | Intervention Strategies  | Metrics  | Baseline  | Metric Source   | Short-Term Target (1 Year) <sup>1</sup>  | Mid-Term Target (2 Year) <sup>1</sup>  |
|---|--|--|--|--|---|---|--|--|
| Programs operating in siloed pots of funding do not deliver comprehensive treatment, missing an opportunity to be cost efficient and to have a higher program participation and satisfaction rate | The design of current low-income programs limits the potential for comprehensive savings while still attaining cost effective program delivery | Programs are blended to provide maximum benefits to the owners and tenants of multifamily properties while enabling improved program resource efficiency | 1. Blend the LIFT incentives with MCE's Multifamily Energy Savings Program rebates to provide maximum incentives to the property owners  | 1. % of units receiving comprehensive upgrades <sup>2</sup> using both MCE's Energy Savings and LIFT program offerings<br><br>2. Average savings per unit for LIFT is more than the average savings per unit for PG&E's ESA program<br><br>3. % of property owners/ managers that rate the ease of participation as high   | 1. Program Year 1<br><br>2. 3.32 MMBTU <sup>3</sup> saved per unit<br><br>3. Program Year 1 | 1. Program tracking data<br><br>2. Program tracking data<br><br>3. Post-treatment participant survey data | 1. 60% (330/550 units)<br><br>2. The average savings per unit for LIFT is more than the average savings per unit for PG&E's ESA program<br><br>3. 80% of participants rate that it is easy to participate in the program | 1. 60% (560/932 units)<br><br>2. The average savings per unit for LIFT is more than the average savings per unit for the PG&E's ESA program<br><br>3. 80% of participants rate that it is easy to participate in the program |
| The apprehension of the consequences around income verification and sharing of personal information creates a barrier to program participation even if the consequences will not actually occur   | Fear of consequences related to personal information disclosure  | Increased participation from "hidden communities" as residents are assured that it is safe to share information with the program                         | 1. Work with community-based organizations (CBOs) and trusted messengers <sup>4</sup> to educate residents on the value of programs, benefits of energy efficiency, and address other concerns prohibiting them from participation | 1. % of units meeting one or more of the following criteria:<br>- residents receive program information in a language other than English (will track languages)<br>- residents are engaged by community based organizations (CBOs) who indicate they had not previously participated in energy efficiency programs due to concerns around sharing personal information<br>- located outside of Cal Enviro Screen 2.0 designated disadvantaged communities<br>- are occupied by extended or multiple families | 1. Program Year 1   | 1. Program tracking data  | 1. 40% (220/550 units)   | 1. 40% (373/932 units)   |
| Low-income multifamily renters face higher energy burden and are hard to reach  | Landlord approval, rent increase and lack of incentive   | Increased participation from income eligible communities   | 1. Targeting landlords and property owners to reach eligible and hard to reach multifamily renters   | 1. % of the eligible households <sup>5</sup> that install efficiency measures through the LIFT program   | 1. Program Year 1   | 1. Program tracking data  | 1. 1% of income eligible households in MCE's service territory <sup>6</sup> (550/56,087)   | 1. 2% of income eligible households in MCE's service territory <sup>6</sup> (932/56,087)   |

<sup>1</sup> MCE assumes it will serve 550 units in the first year of the program and 932 units in the second year, touching between 12-24 properties in total. Second year targets are not cumulative.

<sup>2</sup> Comprehensive upgrades refer to projects with measures that fall into two or more end-use categories.

<sup>3</sup> The MMBTU was calculated using the costs and savings data presented in the ESA Table 1 "Overall Program Expenses" and ESA Table 2 "Expenses and Energy Savings by Measures Installed" of the Pacific Gas and Electric Company ESA Program and CARE 2016 Annual Report.

<sup>4</sup> Trusted Messengers include local organizations and community leaders that are well-known and trusted in low-income communities. Due to trusted messengers' status in these communities, they will help alleviate customer concerns about program participation and help target messaging to effectively reach hidden communities and drive participation.

<sup>5</sup> An eligible household is one that meets a Commission-approved ESA eligibility criterion, for example a household income at or below 200% of the federal poverty level.

<sup>6</sup> The eligible population figures for Napa and Marin were taken as is from PG&E's Attachment A of "Compliance Filing Regarding Annual Estimates of Care Eligible Customers and Related Information" filed on February 10, 2017 in A.14-11-007 et al. For Contra Costa County, the total eligible population was calculated by multiplying the American Community Survey 5-Year Estimates 2015 occupied housing units in Richmond, Benicia, El Cerrito, San Pablo, Walnut Creek, and Lafayette with the demographic eligibility rate (from Attachment A). Available at <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M175/K295/175295964.PDF>.

LIFT Pilot Heat Pump Barriers and Metrics Table

| Problem Statement   | Market Barriers   | Desired Effects/2-Year Vision  | Intervention Strategies  | Metrics  | Baseline          | Metric Source                             | Short-Term Target (1 Year) <sup>7</sup>        | Mid-Term Target (2 Year) <sup>7</sup>          |
|---|---|--|--|--|-------------------|---|--|--|
| Fuel-switching measures are hard to justify as the environmental, and health and comfort benefits are not considered when compared to existing technology | The high upfront cost of fuel switching owing to current regulatory framework | The full potential of fuel switching measures is valued and quantified | 1. Replacing problematic natural gas heating or hot water system equipment to resolve health and safety issues and improve the efficiency of a home's heating system | 1. # of heat pumps installed<br><br>2. Gather the following data to support advancement of fuel switching policies:<br>- procurement and installation costs of heat pumps including costs of bulk purchase<br>- the impacts of fuel switching on bill savings and net costs to the customers<br>- reduction in greenhouse gas (GHG) emissions, nitrogen oxides (NOx), and sulfur oxides (SOx)<br>- source British thermal units (BTU) savings<br>- impacts on resident's health, comfort, and safety | 1. Program Year 1 | 1. Program tracking data                  | 1. 30 heat pumps                               | 1. 90 heat pumps                               |
| Lack of tenant education could lead to misunderstanding and misuse of the heat pump technology  | Lack of customer exposure due to the newness of heat pump technology          | Tenants are comfortable and satisfied with heat pump technology        | 1. Providing tenants with post-installation education on potential bill reductions or associated bill increases when there is added cooling and heating load         | 1. % of residents who report comfort and satisfaction with the heat pump technology  | 1. Program Year 1 | 1. Post-treatment participant survey data | 1. 80% (tenants of 24/30 heat pumps installed) | 2. 80% (tenants of 72/90 heat pumps installed) |

<sup>7</sup> MCE assumes it will install 30 heat pumps in the first year of the program and 90 heat pumps in the second year. Second year targets are not cumulative.