



Low Carbon Fuels Working for California

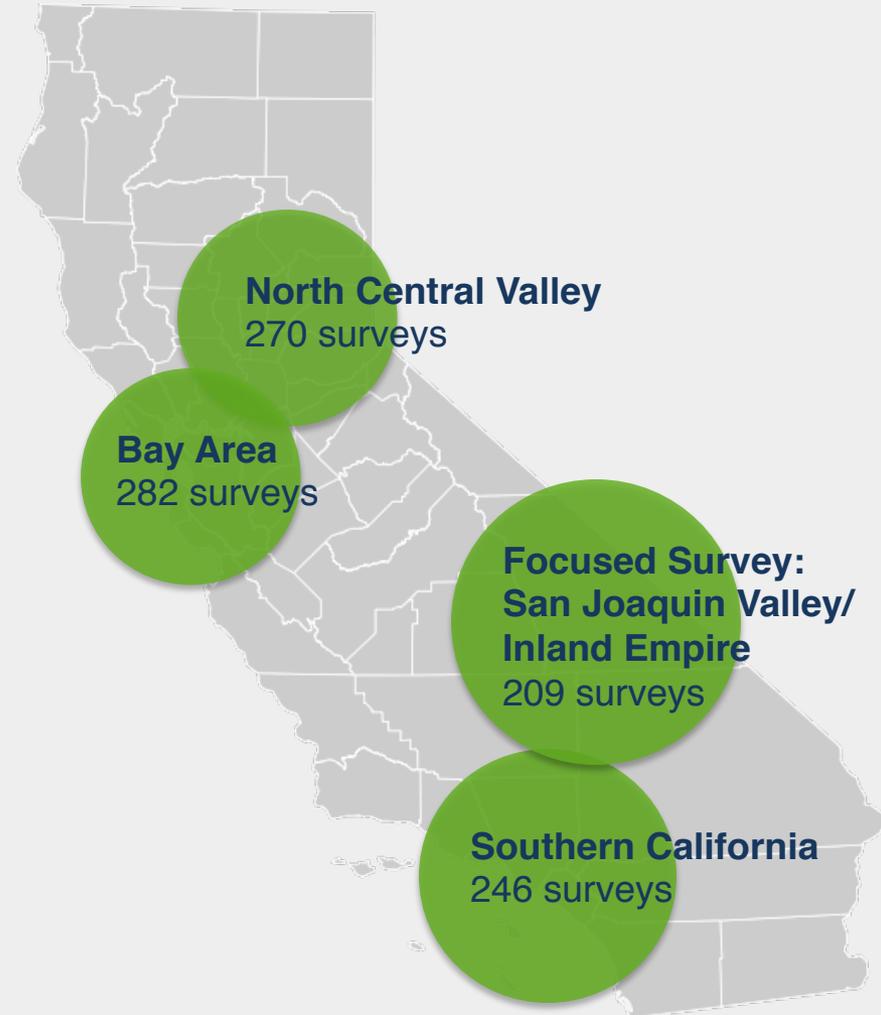
Low Carbon Fuel Infrastructure Market Analytics
Consumer Demographics, Motivators & Barriers

California Low Carbon Fuel Customer Survey

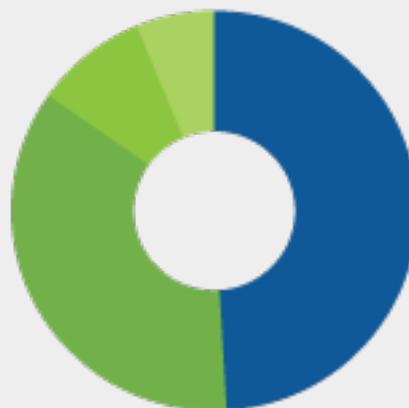
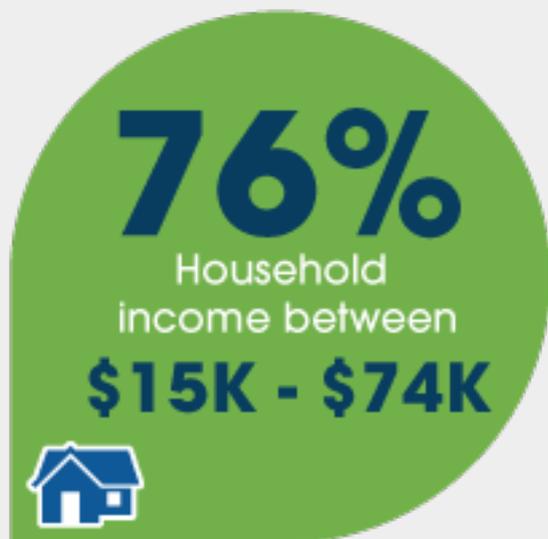
Propel operates 43 Flex Fuel and 31 Biodiesel retail locations statewide, representing over 50,000 clean fuel transactions per month and 10,000,000 gallons of fuel sold to individual consumers annually.

Between 2012 and 2014, Propel Fuels conducted extensive low carbon fuel customer surveys via LUX Research, an independent analytics firm. Survey respondents were intercepted while fueling at Propel locations throughout California.

The survey results offer important insights into the demography of low carbon fuel use and illuminate opportunities to advance significantly California's low carbon goals.



California's Low Carbon Fuel Consumer



49% Latino
34% Caucasian
8% Asian
6% African American
San Joaquin Valley
& Inland Empire



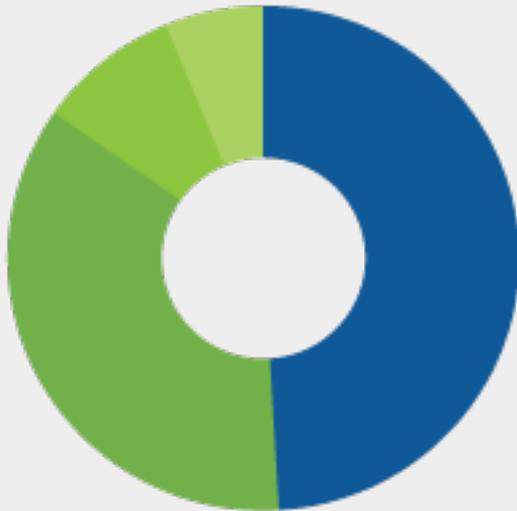
77%

Want more access
to low carbon fuels



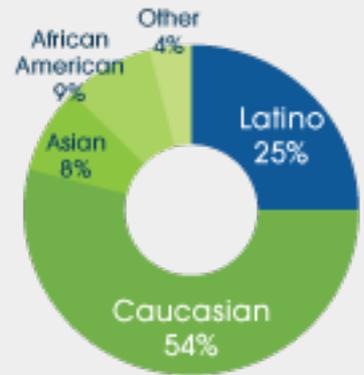
92%
say low carbon fuels are a
Better Value
than petroleum

Low Carbon Fuel Customers Reflect California's Diversity



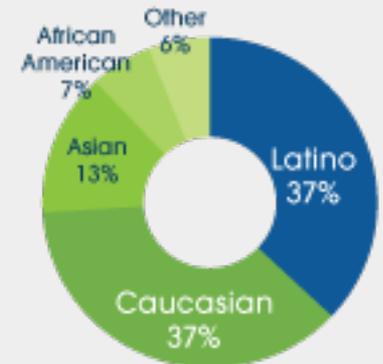
San Joaquin Valley & Inland Empire Survey

Latino 49%
Caucasian 34%
Asian 8%
African American 6%



Statewide Biofuels Survey

Statewide customer base reflects California's diversity

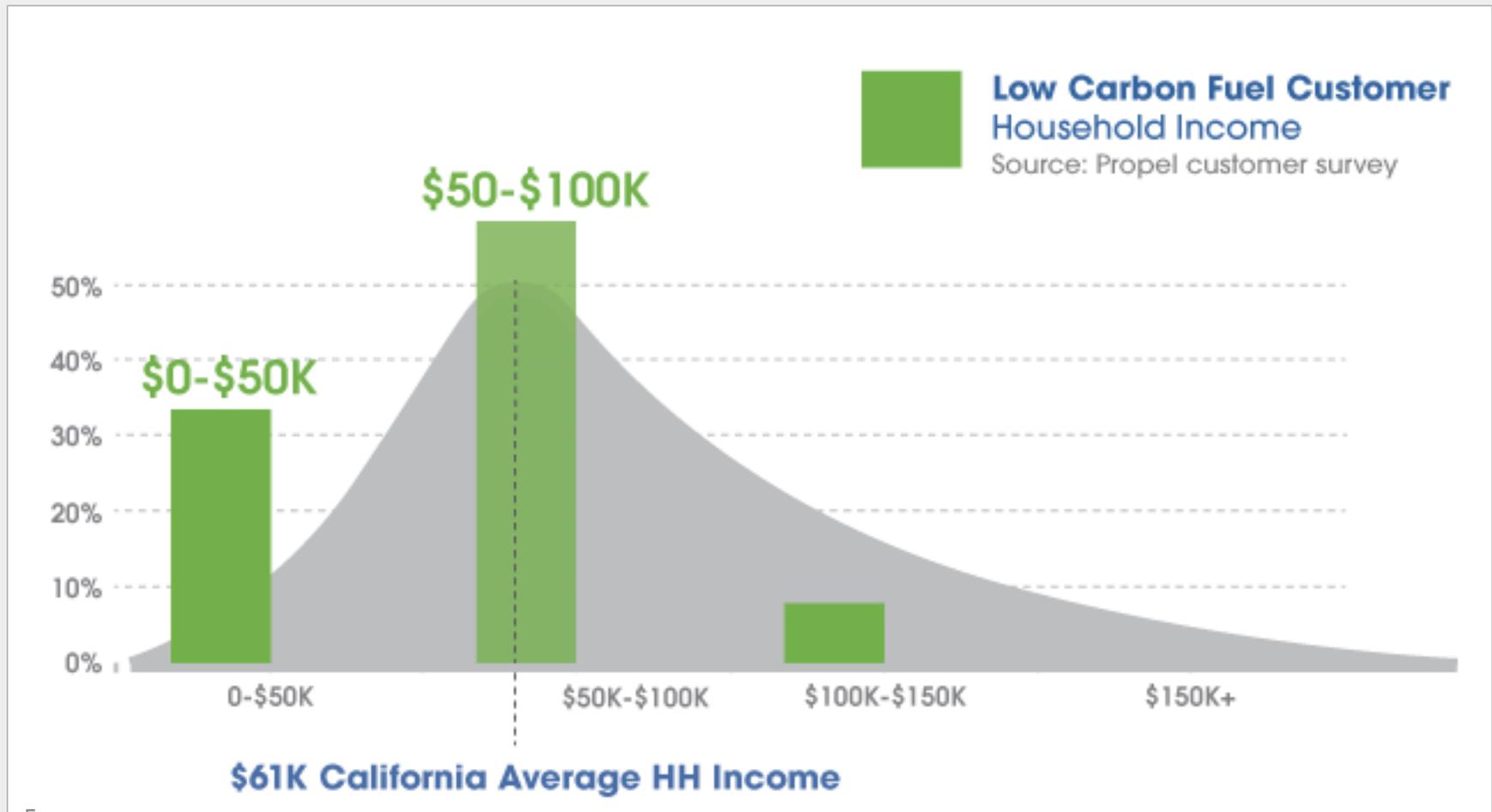


CA Census

Household Income

Low Carbon Fuel Customers

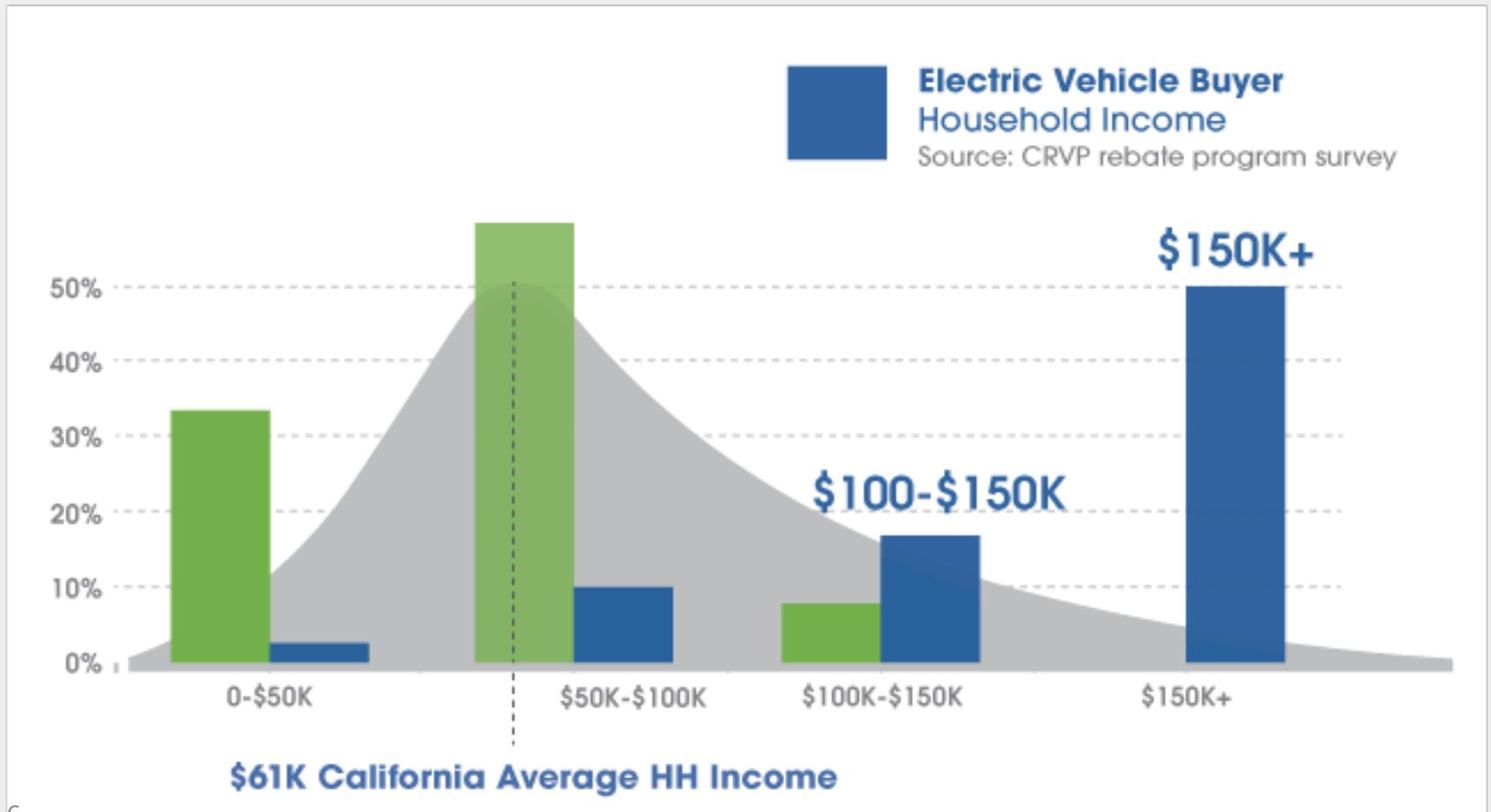
Use is highest among middle and lower income households



Coordinated Low Carbon Policies

Household Income: Low Carbon Fuels + EV

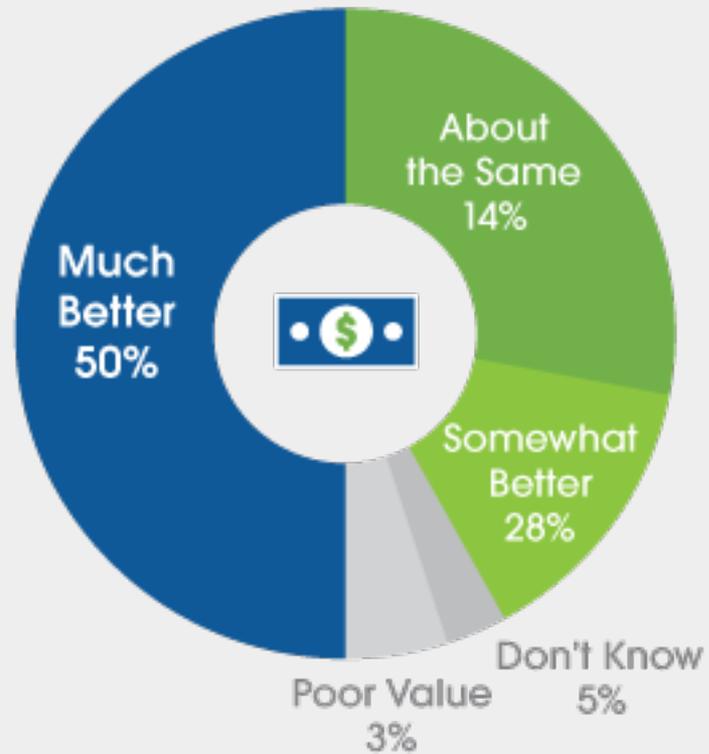
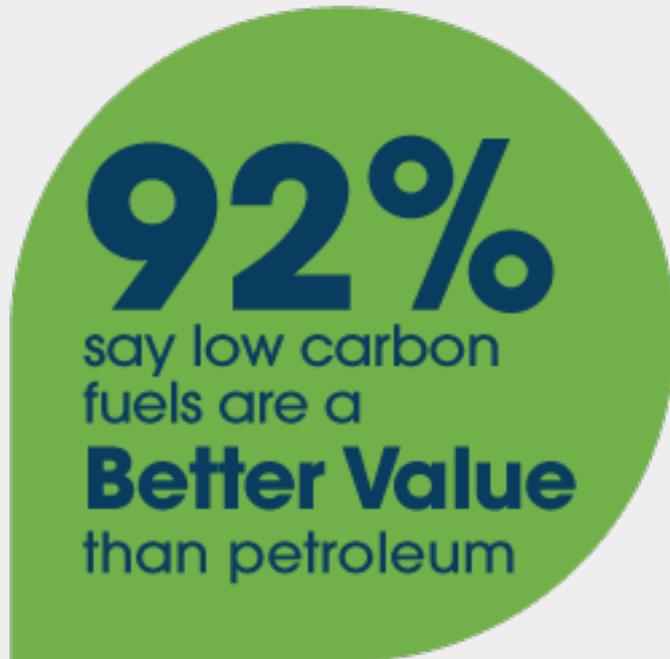
Ensure program durability through equitable participation



Value and Affordability

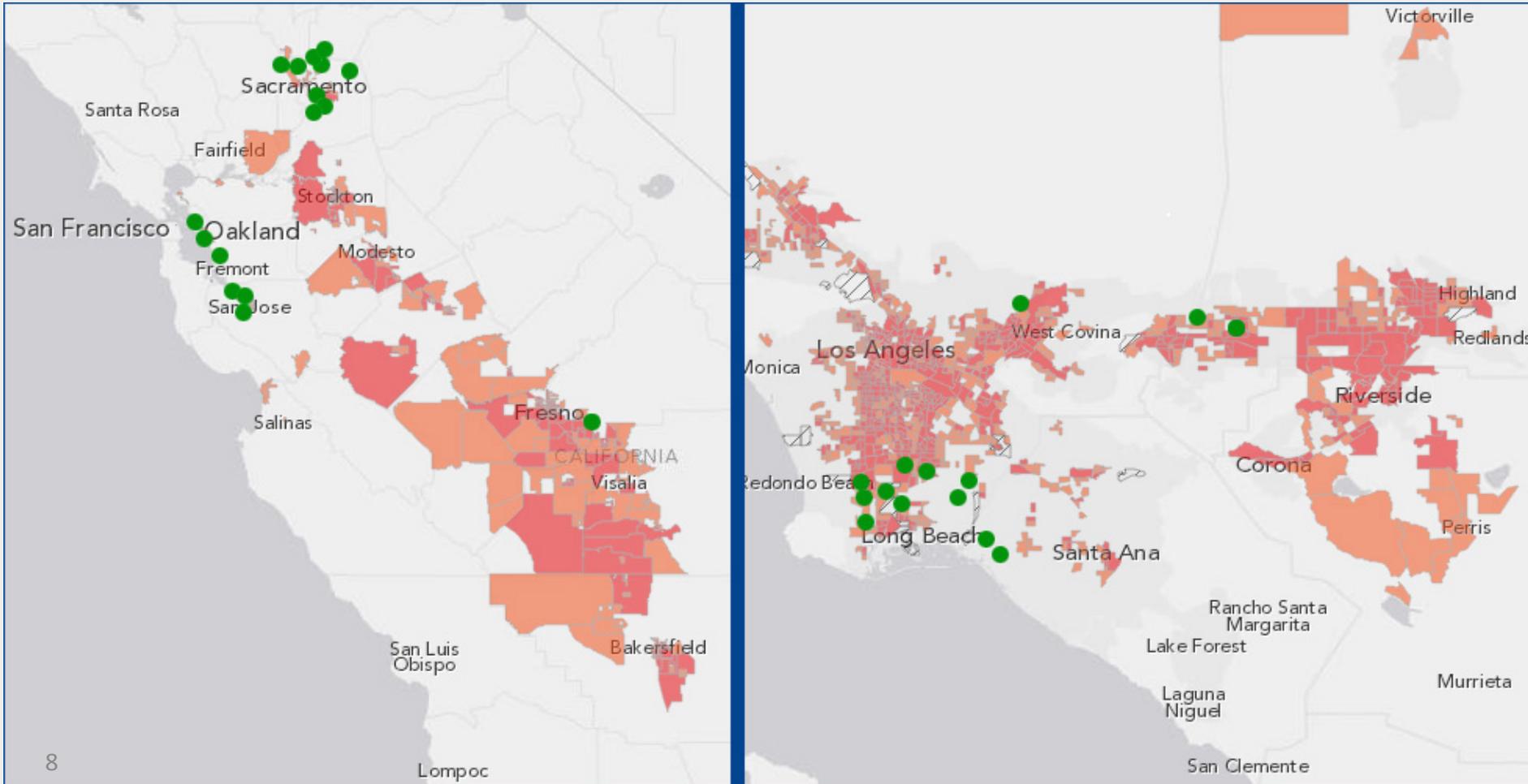
Low Carbon Fuels vs. petroleum fuels

Low carbon fuels are California's most affordable fuels



Serving Disadvantaged Communities

86% of Propel sites are within 10 miles of SB535 Disadvantaged Communities



Summary of Findings

Low carbon fuel users are diverse.

The people who purchase low carbon fuels mirror California's diverse demographic and socio-economic population.

Value is the key to public access.

Affordability is the most critical component to broad participation in California's low carbon economy.

LCFS is already working for Disadvantaged Communities.

With the support of LCFS, the market has introduced fuels that more affordable and higher performing: lower carbon intensity and lower criteria pollutants, including PM and NOx. Investment in retail infrastructure in targeted areas delivers these important fuels the final mile, producing *measurable* benefits to California's most impacted communities.

Opportunities for Action

Create an onramp to the State's low carbon economy.

Low carbon fuels empower the average Californian to contribute to the State's low carbon future. Access to those fuels through support for infrastructure is equitable public policy, promoting widespread participation in communities with no other direct opportunities to do so.

Communicate progress to stakeholders.

Low carbon fuels offer a unique reporting opportunity, as their impact is significant, measurable, and near term. GHG reductions and gains for human health provide an occasion to report to stakeholders: measurable public health outcomes and California's commitment to enrolling all its residents on a pathway to a zero-carbon future.

Expand effective policy.

A robust market for increasingly low carbon fuels underpins the success of the LCFS program. With the knowledge, now, that these fuels are favored by California's most vulnerable residents, infrastructure that can extend these benefits deeper into Disadvantaged Communities should be granted public support.



Customer Study

San Joaquin Valley
June 2014



Frank H.
Fresno, CA
Fuel choice: Biodiesel
Vehicle: Dodge Ram
Occupation: Retired U.S. Navy



J Abigayl M.
Clovis, CA
Fuel choice: Flex Fuel E85
Vehicle: Ford F150
Occupation: Owner, Drywall Business



Isabel G.
Fresno, CA
Fuel choice: Flex Fuel E85
Vehicle: Dodge Caravan



Filberto R.
Fresno, CA
Fuel choice: Flex Fuel E85
Vehicle: Chevrolet Tahoe



Tisha A.
Fresno, CA
Fuel choice: Flex Fuel E85
Vehicle: GMC Sierra
Occupation: Nurse

Clean
Alternative



Angel S.
Clovis, CA
Fuel choice: Flex Fuel E85
Vehicle: GMC Sierra



Get more with
CleanDrive
Preferred customers have access
to exclusive rewards, priority service
& more. Join today.

John C.
Fresno, CA
Fuel choice: Flex Fuel E85
Vehicle: Ford F150



Rosalia D.
Fresno, CA
Fuel choice: Flex Fuel E85
Vehicle: Dodge Caravan



Ben E.
Fresno, CA
Fuel choice: Biodiesel
Vehicle: Chevrolet Truck
Occupation: Hauler



Dave A.
Fresno, CA
Fuel choice: Flex Fuel E85
Vehicle: GMC Sierra
Occupation: Worldwide Trucking

Clean
Alternative Fuel



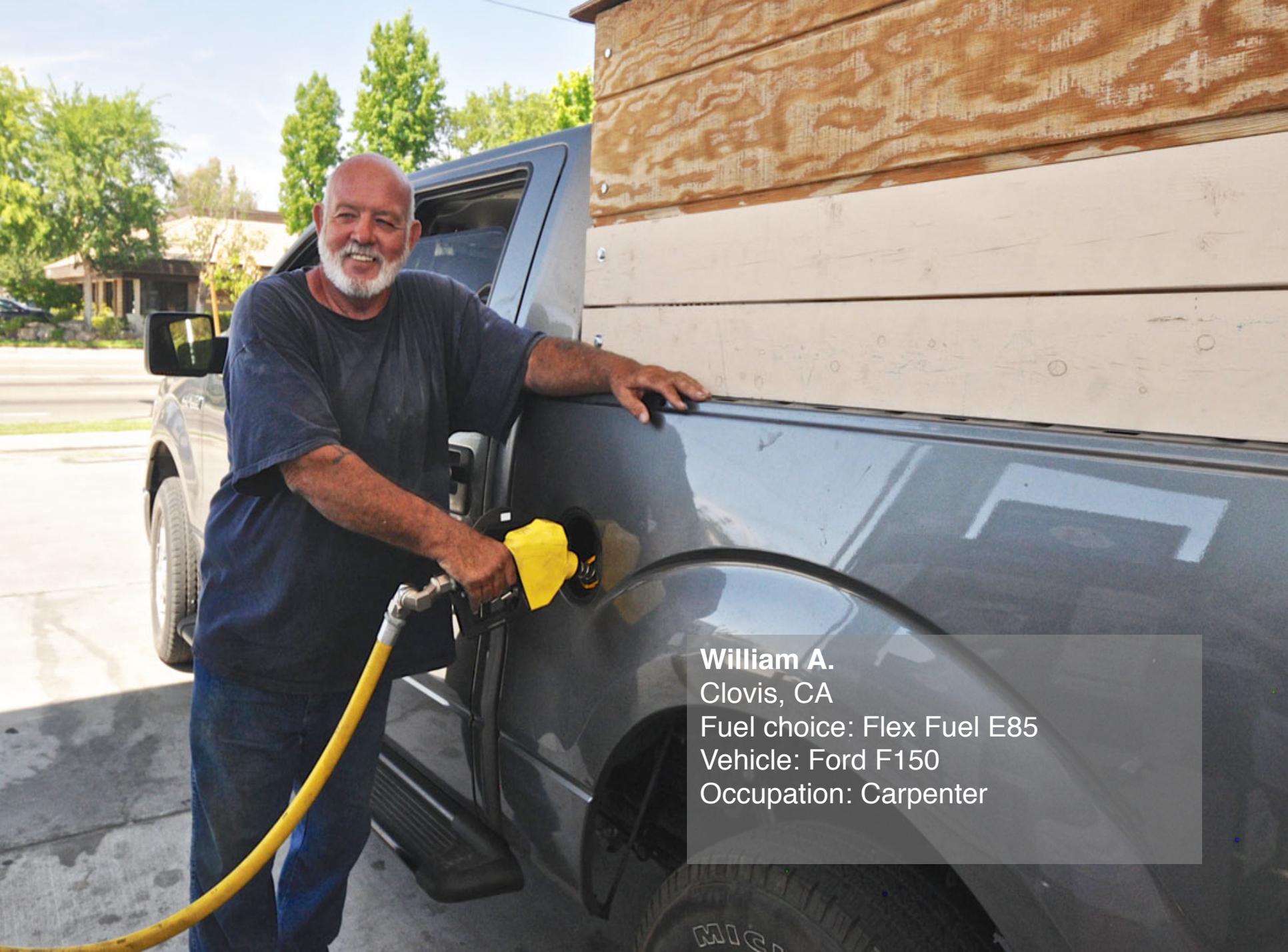
U.S. Department of Energy

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Leroy P.
Clovis, CA
Fuel choice: Flex Fuel E85
Vehicle: Ford Ranger



William A.
Clovis, CA
Fuel choice: Flex Fuel E85
Vehicle: Ford F150
Occupation: Carpenter



Heather H.
Clovis, CA
Fuel choice: Flex Fuel E85
Vehicle: Chevrolet Tahoe



Sergio M.
Fresno, CA
Fuel choice: Flex Fuel E85
Vehicle: GMC Sierra
Occupation: Builder/Construction

Citations

Low Carbon Biofuel Customer Survey designed by independent research firm Lux Insights. Customer surveys conducted at Propel fueling locations.

- Individual responses: 1007
- Margin of error: 3.3%
- Statewide Survey: March 2012
- San Joaquin Valley/ Inland Empire Survey: June 2014

Low Carbon Biofuel Customer Income Data: Claritas/Nielsen PRIZM Segmentation Systems, 2012, 2014,
<http://www.claritas.com/MyBestSegments/Default.jsp?ID=100&menuOption=learnmore>

Electric Vehicle Consumer Data

Clean Vehicle Rebate Project (CVRP) User Survey, Oct 2013, May 2014
<http://www.energycenter.org/evsurvey>

Census Data

U.S. Census Bureau
University of Michigan Population Studies Center
<http://www.psc.isr.umich.edu/dis/census/Features/tract2zip/index.html>

Fuel Data

Renewable Diesel: CARB Assessment of the Emissions from the Use of Biodiesel as a Motor Vehicle Fuel in California
Biodiesel Characterization and NOx Mitigation Study, October 2011
http://www.arb.ca.gov/fuels/diesel/altdiesel/20111013_CARB%20Final%20Biodiesel%20Report.pdf
E85: Effect of E85 on Tailpipe Emissions from Light-Duty Vehicles, 2009
http://www.afdc.energy.gov/pdfs/technical_paper_feb09.pdf

Survey Contact

Rob Elam, Propel Fuels
rob@propelfuels.com