



Engaging the Homeowner to Learn about Energy Efficiency

Agenda

- 1) INTRODUCTIONS
- 2) POLLING QUESTION
- 3) ROUND ROBIN QUESTIONS
- 4) SPEAKERS
- 5) Q&A

Panel

- **Jonathan Cohen**, DOE - Moderator
- **Devon Hartman**, Community Home Energy Retrofit Project
- **Diane Duva**, State of Connecticut
- **Beth Galante**, PosiGen

Residential Network

Better Buildings Residential Network: Connects energy efficiency programs and partners to share best practices and learn from one another to increase the number of homes that are energy efficient.

Membership: Open to organizations committed to accelerating the pace of home energy upgrades.

Benefits:

- Peer Exchange Calls
- Tools, templates, & resources
- Newsletter updates on trends
- Recognition: Media, materials
- Voluntary member initiatives
- Better Buildings Residential Program Solution Center

Commitment: Provide DOE with annual number of residential upgrades, and information about associated benefits.

Introductions

I. Name

II. Affiliation

III. Role

Polling Question

What sector do you work in?

- Local government
- State government
- Federal government
- Nonprofit
- Utility
- Business

Round Robin Questions

- What has been the best way to engage homeowners from your experience?
- What has been the worst way to engage homeowners from your experience?

QUESTION TO LEAD INTO SPEAKER #1

What's the best way to get an interested homeowner with resources to do an energy efficiency upgrade?

QUESTION TO LEAD INTO SPEAKER #2

What are the barriers to engagement?



Connecticut Department of Energy and Environmental Protection



Diane Duva, Director, Office of Energy Demand
Diane.Duva@ct.gov

www.EnergizeCT.com

U.S. DOE Better Buildings Conference
May 2015



Empowering you to make
smart energy choices

Engaging the Homeowner to Mainstream Energy Efficiency

CT DEEP, Eversource, United Illuminating, the Connecticut Green Bank, and the CT Energy Efficiency Board

May 2015

Mainstreaming Energy Efficiency Means *Remove Barriers* to Engaging Residents

**Energy Efficiency
Awareness**



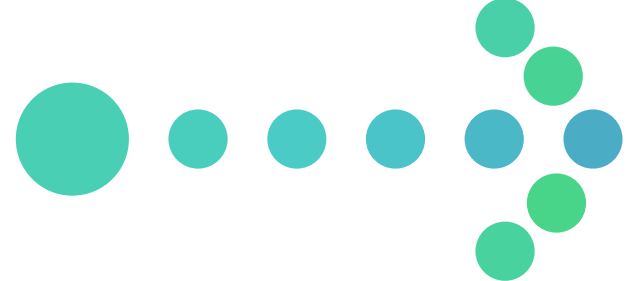
Financing



**Building maintenance
status (health and safety)**



**Energy
Efficient
Homes**



Today's Focus: Increasing Awareness

**Energy Efficiency
Awareness**



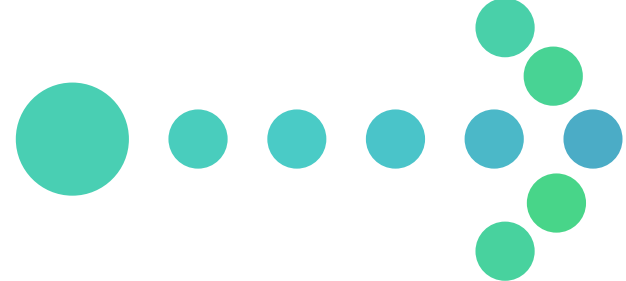
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Increasing Awareness Means Engaging Residents through a Customer-Centered Culture



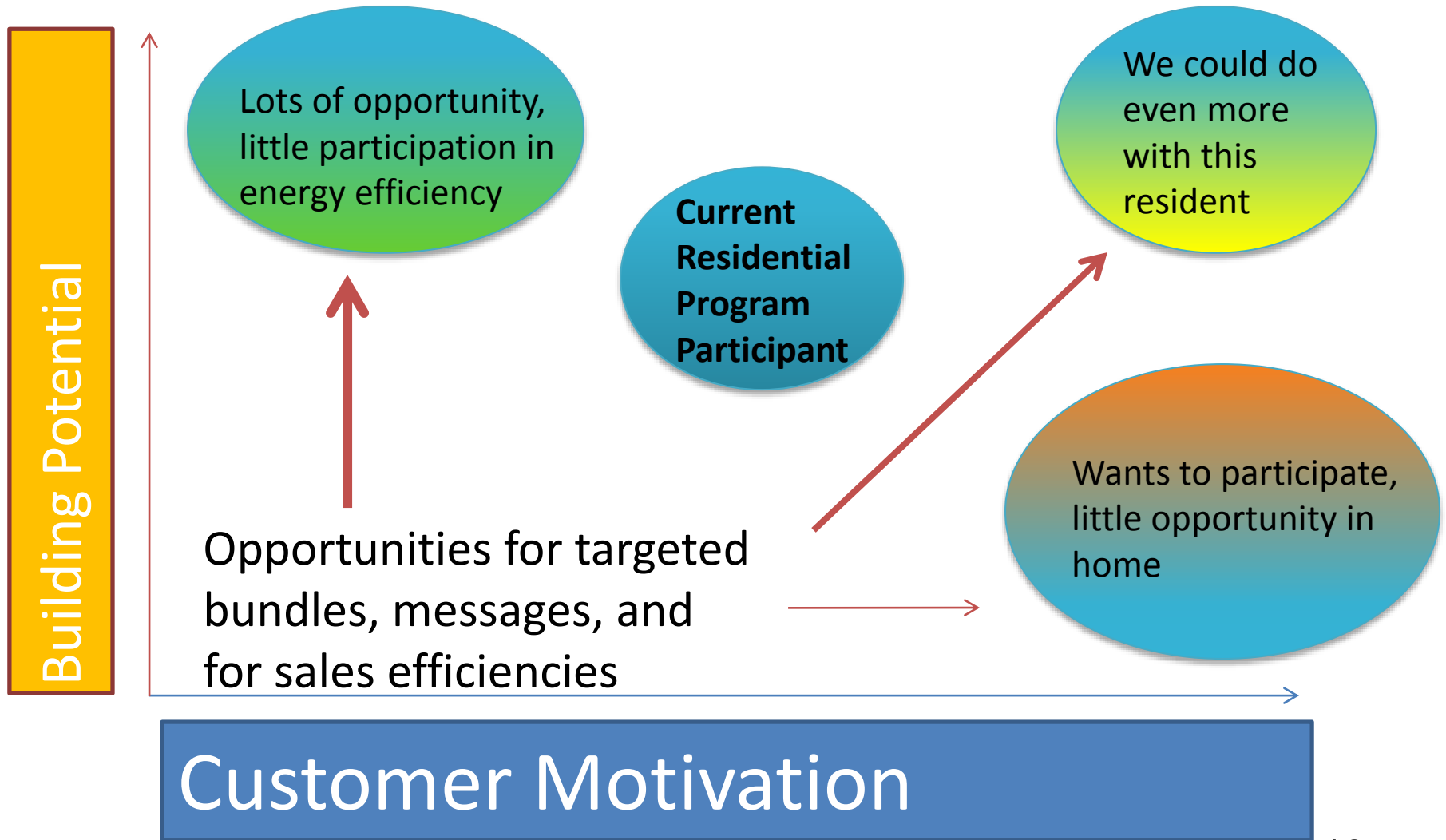
Know the Customer:

Participant Profiling and Segmentation

Behavioral Data	Building Attributes	Demographics
<p>Past Efficiency Program Participation:</p> <ul style="list-style-type: none">▪ Audits▪ Rebates▪ Weatherization <p>Energy Usage</p>	<p>Length of Residence</p> <p>Age of Home</p> <p>Renovation History</p> <p>Home Equity Ratio</p> <p>Size of Home</p> <p>Owner Occupied</p> <p>Single vs Multi Family</p> <p>Heating Fuel Type</p>	<p>Head of Household age</p> <p>Income</p> <p>Education Level</p> <p>Presence of Children</p> <p>Marital Status</p> <p>Language</p>

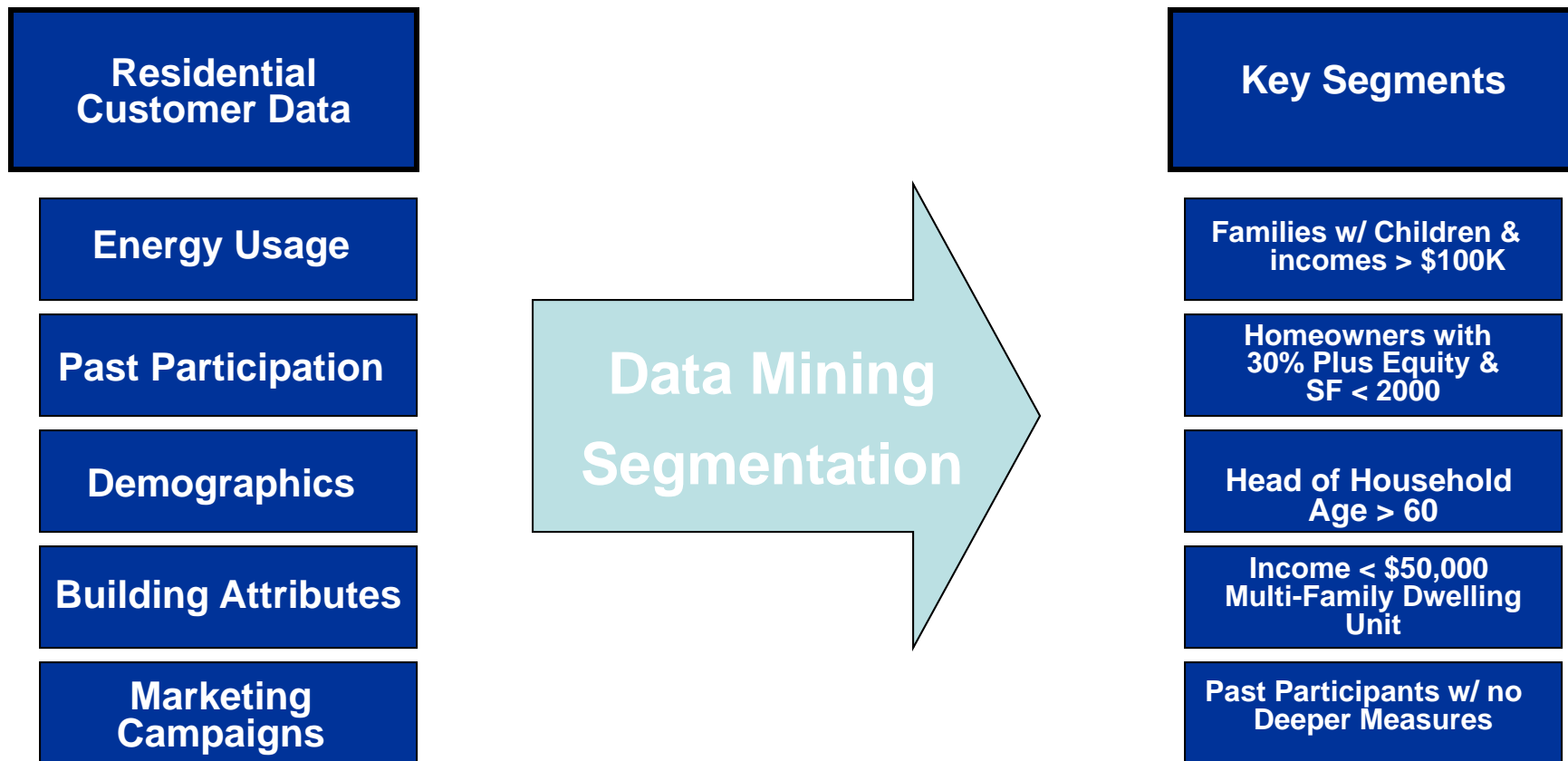


Opportunities and Motives Vary, Resulting in Varied Customer Segments



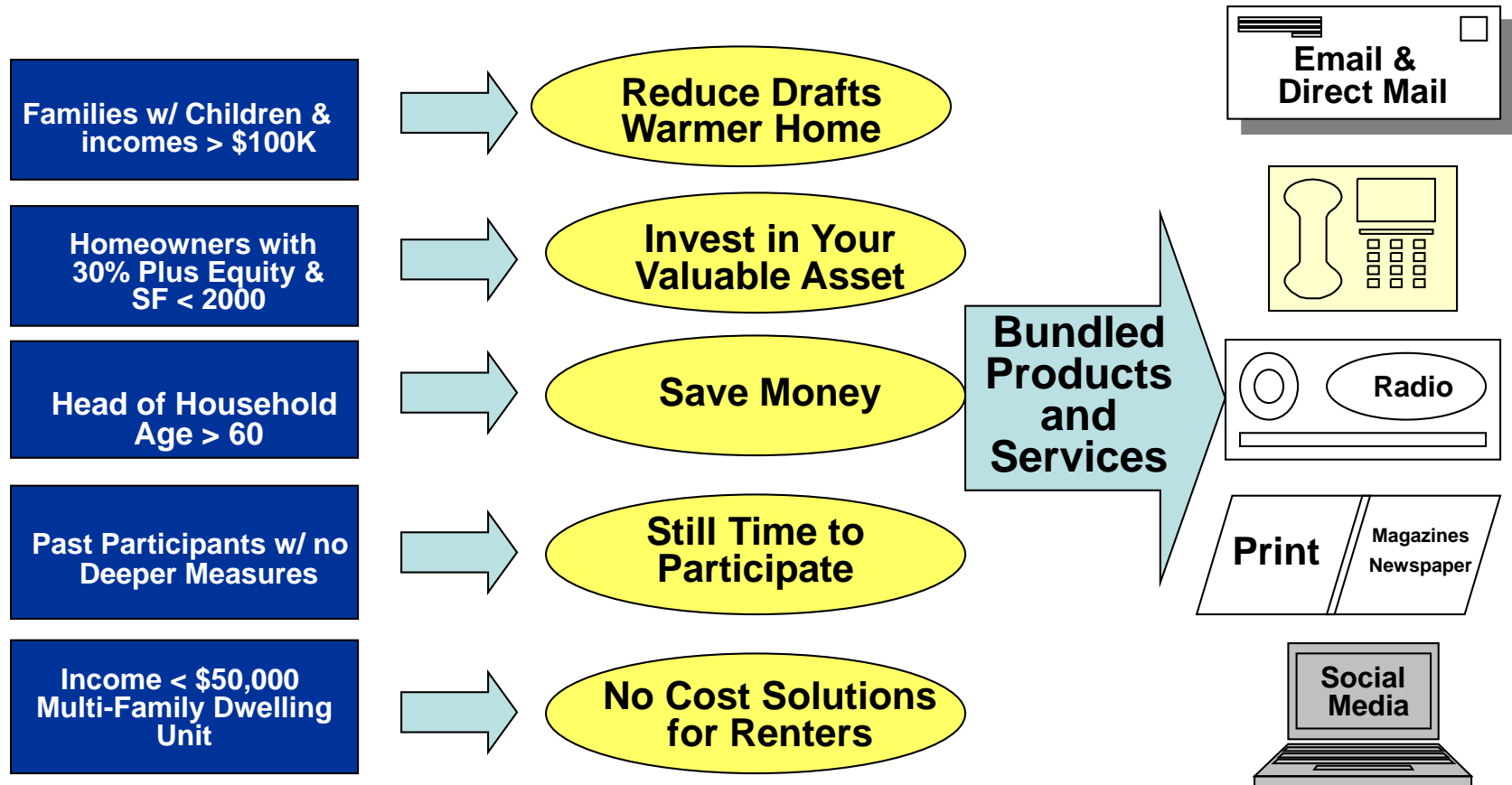
Tailor the Message Example

Better understanding of our customers through effective segmentation



- Segmentation is a continual process with ongoing refinement as learnings are identified
- Successful segmentation efforts are kept simple and highly actionable

Targeted Customer Segments Receive Tailored Messages and Bundled Products and Services via Varied Channels



Example of Customized Comprehensive Product Bundles to Mainstream Efficiency for this Customer

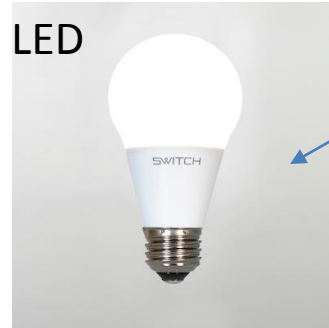
Comfort Seekers

Efficiency Opportunity



Home Energy Assessment with Air Sealing

- Stay Warmer
- Reduce Road Noise



- Better Quality Light
- Dimmable

Ductless Mini Split Keeps you Cool in Summer



Low Interest HVAC Financing is Easy



High Quality Appliances

Efficiency financing means you can invest in efficiency *and* granite countertops

Next: Changing Expectations Compel Customer Engagement Platform Development

Customers
are becoming more...

...knowledgeable

...demanding

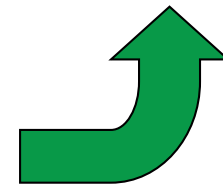
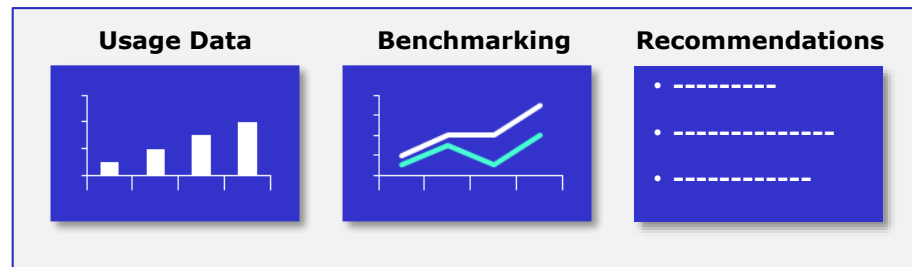
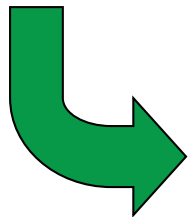
...empowered



Benefits To Customers:

- Personalized experiences
- Targeted, Relevant recommendations
- 24/7 access to information
- Effectively bundled energy solutions
- Enhanced customer experience

Customer Engagement



Next Level: Customer Engagement Platform

Generate Actionable Customer Insights

- Robust Data Warehouse
- Third Party Information
- Data Mining and Analytics
- Reporting Dashboards
- www.ctenergydashboard.com

Personalize Inbound Customer Interactions

- Web & Mobile Interface
- Online Assessments
- Measure Fulfillment
- www.EnergizeCT.com

Personalize Outbound Communications

- Campaign Management
- Sales Automation
- Electronic Rebate Status

Improved Overall Customer Experience

Increased Energy
Efficiency Program
Participation

Continuous Customer
Engagement

QUESTION TO LEAD INTO SPEAKER #3

What is the best way to accelerate the pace of residential upgrades, so a program can go from 0 to 1000 homes per year?



A Hyper-Local Solution to a Nasty Global Problem





Addressing the Barriers to Market Transformation

1

Education – (uncovering latent demand)
in the Power and Benefits of Energy Efficiency

2

Quality Contractors – (supply the demand)
for Public Satisfaction and Deep-Energy Retrofits



CHERP



JUST THE FUN!



CHERP



Energy Efficiency!



CHERP



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CHERP Energy Loans
Program Details

Sign up and
Win \$...

This house is

CHERP -ing

House Number: **63**



Claremont Home Energy Retrofit Project

ClaremontEnergy.org

My energy bills are lower



This house is

CHERP -ing

House Number:

ClaremontEnergy.org





Claremont
Home
Energy
Retrofit
Project

ClaremontEnergy.org

CHERP



My Home
is more
comfortable



CHERP



CHERP



I'm saving
energy



Is your
house
CHERP
ing

CHERP
A County
Champion
ClaremontEnergy.org

Is your
house
CHERP
ing

ing
art



I'm saving energy



I'm helping to reduce my carbon footprint



My home is quieter
Is and more comfortable
CH WVV

Is your home
CHERP ing





CHERP



City-Wide Workshops



2
5
0
8

This house is **CHERP** ing

House Number: 4



Claremont Home Energy Retrofit Project
ClaremontEnergy.org

SGE California CleanShot



This house is
CHERP
House Number: 8
ClaremontEnergy.org

51



This house is **ChERP**-ing
House Number: **53**
Claremont Home Energy Retrofit Project
ClaremontEnergy.org





CHERP

This house is

CHERP

-ing!

HOUSE #

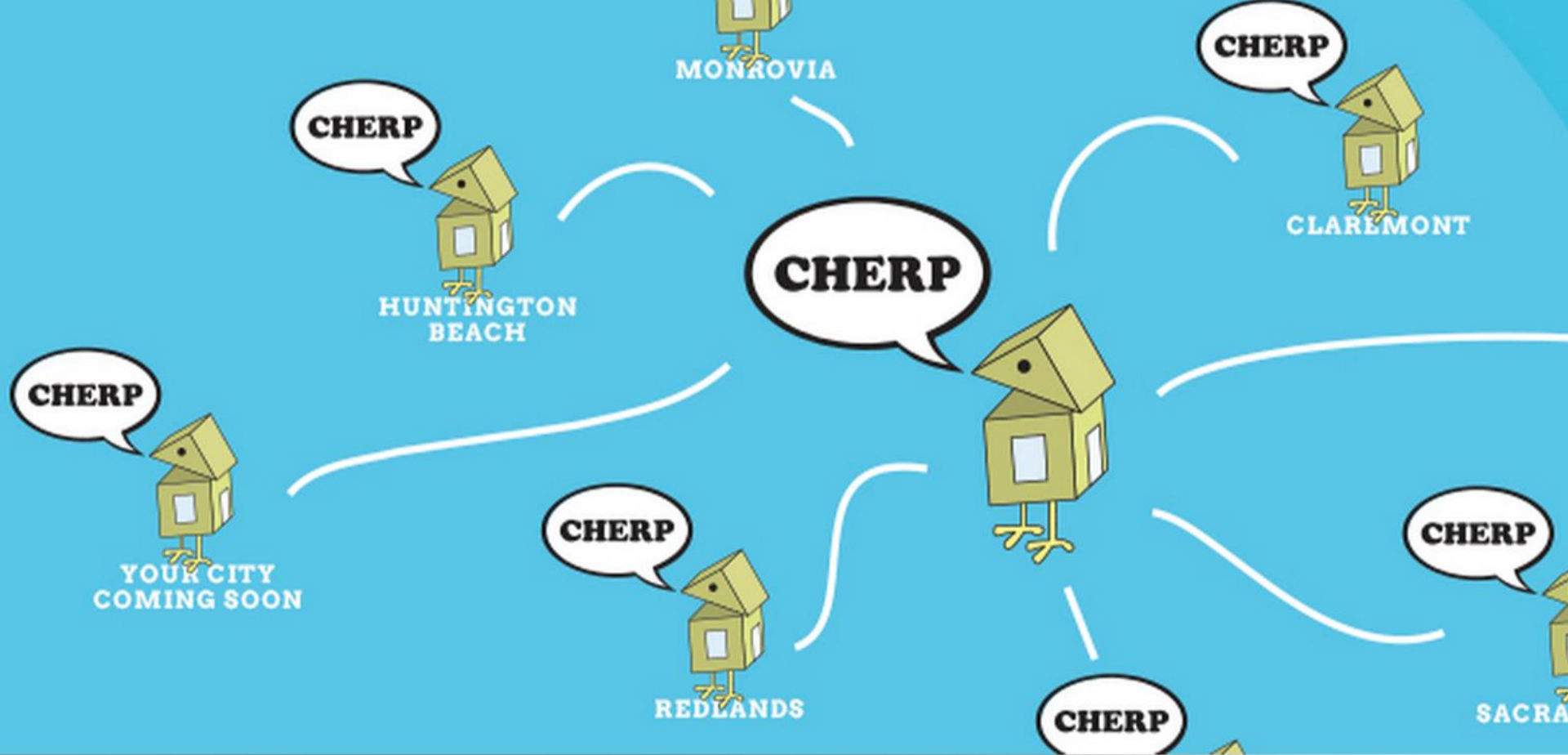
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www.CHERP.net

Multiple Benefits:
Utility Savings
Comfort
Air Quality & Health
Increased Value
Resilience
CO2 Mitigation
Rebates!
Preservation
Community ROI

Presented by
SUNY COLLEGE
of
Environmental
and
Forestry
SUNY COLLEGE
of
Environmental
and
Forestry





All processes are designed to be...

Replicable and Scalable

How are CHERP Initiatives selected?

Innovative, Replicable, and Scalable

Actual Energy Reductions for 2015-2016 against last 2 years.

Criteria	Points
Energy Reduction – Residences, K-12, Municipal	25
Innovation	15
Potential for Replication	15
Likely Future Performance	10
Equitable Access across all groups and demographics	10
Education	10
Overall Quality and Success	15

A red bracket on the right side of the table groups the following criteria: Innovation (15), Potential for Replication (15), Likely Future Performance (10), Equitable Access across all groups and demographics (10), and Education (10). A red "75%" is placed next to the bracket, indicating that these five criteria together account for 75% of the total points available (75 out of 100).

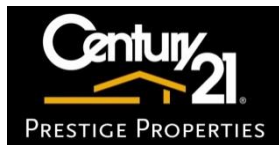
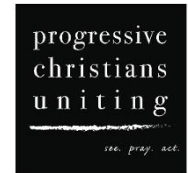
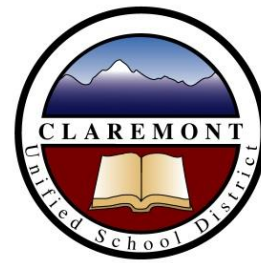


Reaching the Entire Community



Resource	Action Plans									
Interns	→									
K-12	→									
CHERPers										
Pilgrim Place										
Comm. Orgs	Action Plans	Jan	Feb	March	April	May	June	July	Aug	
1.	→									
2.	→									
3.	→									
4.	→									
5.	→									
6.	→									
7.	→									
8.	→									
9 -50	→									





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Sam Pedroza
Angela Bailey
Kathryn Dunn
Sally Seven
Marilee Scaff
William Ascher

HUNDREDS OF VOLUNTEERS

Pilgrim Place Student Interns K-12 students and teachers 260 CHERPers
50 Community Organizations

CLAREMONT ENERGY CHALLENGE



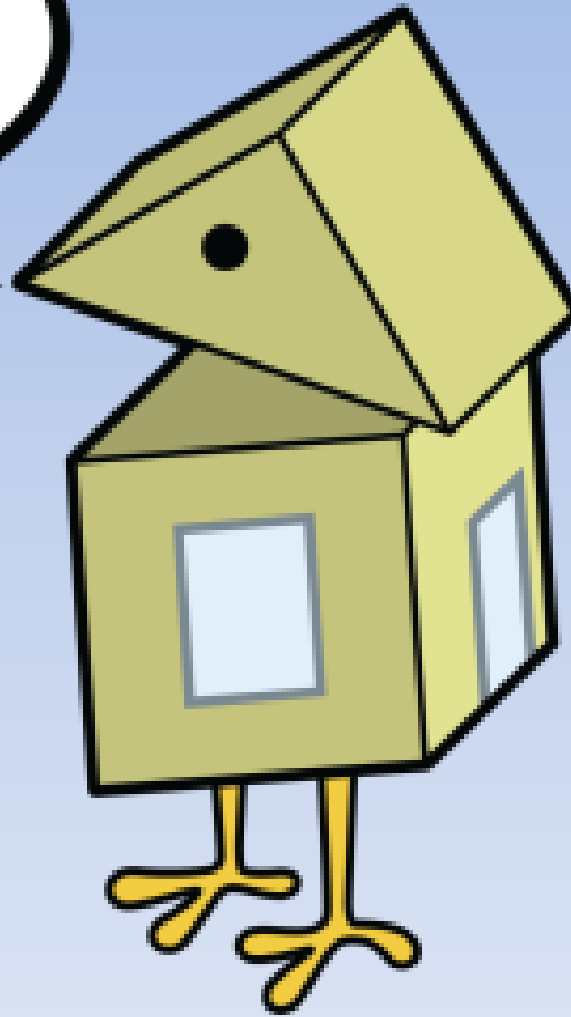
What makes CHERP different?

1. Hyper Local
2. Deep Education
3. Replication - now in 9 cities throughout California
4. Leveraging over 200 local volunteers (9 sub-committees, 10 Initiatives)
5. Public/Private Partnerships
6. 50 Organizations reaching their constituents with learning opportunities
7. 260 CHERPer households educating neighbors
8. K-12 Programs and Competitions
9. Pilgrim Place – CHERPers, Seniors, Retirement Communities
10. The Matrix
11. Realtor Mentoring
12. Walk the Town – Freeman, Civic Spark, Students, Orgs.
13. LED the Town
14. IdealPV – Claremont Locally Grown Power
15. Software to track all changes – HEA.com
16. CHERP Unity
17. Data Tracking – Hal Nelson CGU



CLAREMONT ENERGY CHALLENGE

CHERP



Driving Energy Efficiency and Economic Recovery



Engaging the Homeowner to Learn about Energy Efficiency:
Rapid Acceleration through Solar & Community-Based Marketing
May 28, 2015

Elizabeth Galante
Vice President of Business Development & Governmental Affairs

Mission

PosiGen's mission is to help low-to-moderate income families achieve greater financial security and energy independence by lowering their utility costs.

We don't just sell solar or energy efficiency - we deliver a positive financial impact in our customer's lives.



Helping Those Who Need It Most

Our unique approach allows those most in need of utility savings access to solar PV, thermal, and energy efficiency upgrades.

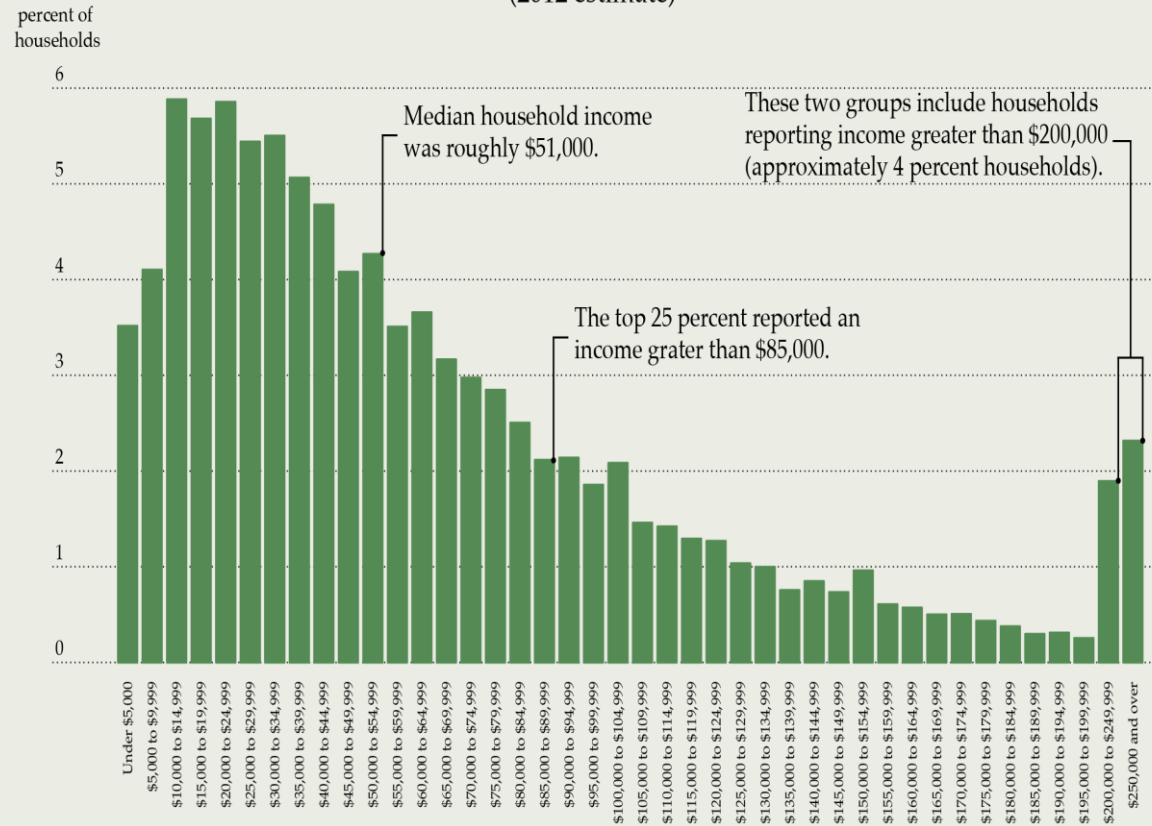
Our average customer reduces his or her monthly electric bill by 40% or more.

Savings guaranteed. Our customers will save more money than they pay in the first year following system installation.

PosiGen 85% Blue Collar Solar Ocean

Other Solar 15%

Distribution of annual household income in the United States (2012 estimate)



Source: U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement



PosiGen recognized the need to combine Solar with Energy Efficiency to maximize our customer's savings.

By combining the two, PosiGen helps customers not only generate their own electricity with Solar, but also conserve that electricity through Energy Efficiency.

Solar and Energy Efficiency gives our customers a Powerful Combination.



The Scalable Approach

Solar PV & Energy Efficiency

All systems are the same size and are combined with proven energy efficiency measures to reduce the home's utility energy usage an average of 12,000 kWh (LA) or 22,900 BTU (CT,NY) per year

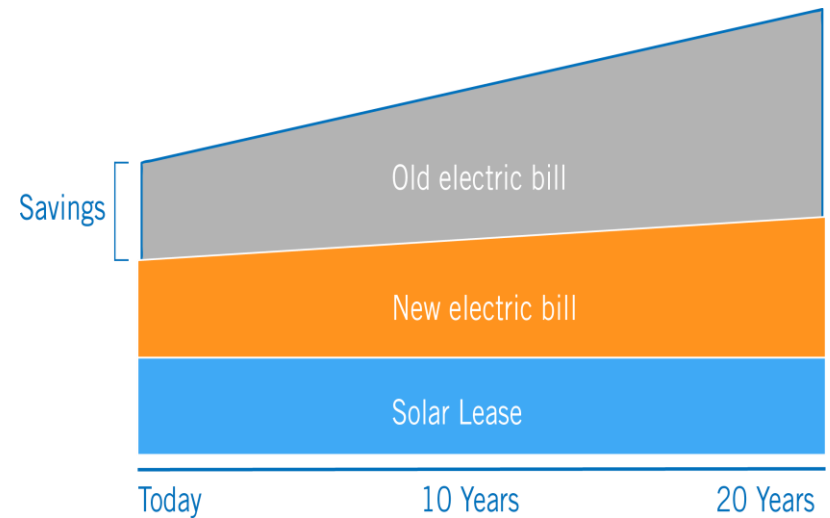
Standardization allows PosiGen to scale rapidly



Customer Value Proposition

PosiGen is able to combine energy efficiency measures and solar systems to shield customers from volatile utility rates and result in monthly savings of up to 50% of utility costs. As shown in the table below, PosiGen's customers reduce on average \$125 per month from their energy bill, making it easy for them to afford their \$65 monthly lease payment. Customers net saving = ~ \$60 per month or \$720 per year.

Solution	Monthly Savings	Annual Savings
Solar Rooftop	\$75	\$900
Energy Efficiency	\$50	\$600
Total Savings	\$125	\$1,500



Demonstrated Commitment to Lower Income Communities

Customers

- 75% of PosiGen 6500 + installs are located in Census tracts with Area Median Family Income below 120%
- 92% of our customers identify as Black or African-American; 65% are female
- 75% of our customers have monthly household incomes below \$50K
- A typical customer's utility bill is reduced by more than \$1,200 per year
- 58% of new sales are referrals from our customers

Careers

- Median salary is 300% of Louisiana minimum wage
- 40%+ of workforce consists of employees who reside in communities with household incomes below the state median

Community

- PosiGen customers inject an aggregate average of \$7.2 million per year back into the local economy in addition to our payroll multiplier of \$10 million for a total community economic impact of \$17.2 million per year
- Donation of solar systems to community - United Way (valued at \$75,000) and the Mary Queen of Vietnam Church
- PosiGen identifies 5 disadvantaged homeowners each quarter whose energy efficiency needs exceed their payment ability, and perform deep dive upgrades out-of-pocket

Engaging the Homeowner to Learn About Energy Efficiency: How To Rapidly Scale A Market

Make It:

- Pocketbook
- Sexy
- Simple
- Fast
- Affordable
- Trustworthy
- Local

Engaging the Homeowner to Learn About Energy Efficiency: How To Rapidly Scale A Market

- **Pocketbook:** Speak in Monthly terms, not Annual
- **Sexy:** Solar!
- **Simple:** Go for Amazon, not Advanced
- **Fast:** 2 Visits, 2 Weeks
- **Affordable:** Performance, NOT Perfection
- **Trustworthy:** Positively Outrageous Service
- **Local:** Let Your Customers & Community Sell

Engaging the Homeowner to Learn About Energy Efficiency: How To Rapidly Scale A Market

New Orleans: Top 10 Solar City In U.S. by end of 2014

- 36 MW installed = 10th in U.S. and 94 Watts per Capita = 6th in U.S.
- 1 residential solar PV system per 53 city residents.
- 3000+ solar homes = 3000+ energy efficiency upgrades
- 2014 Energy Star Partner of the Year Award – 64% PosiGen homes

Your Company/Your Community: Depth vs Breadth Choice

- Better Buildings Program = Deep Dive Retrofits
- BBP Conversion Rates = Majority of Homeowners Untouched
- BPP Future Opportunity = ?

OR

- PosiGen Model = Light Retrofit, Target 15%
- PosiGen Conversion Rates = 90% Conversion Rate
- PosiGen Future Opportunity = Outstanding

What Do You Want for Your Community?

PosiGen Installations in New Orleans Metropolitan Area

Legend

Installs

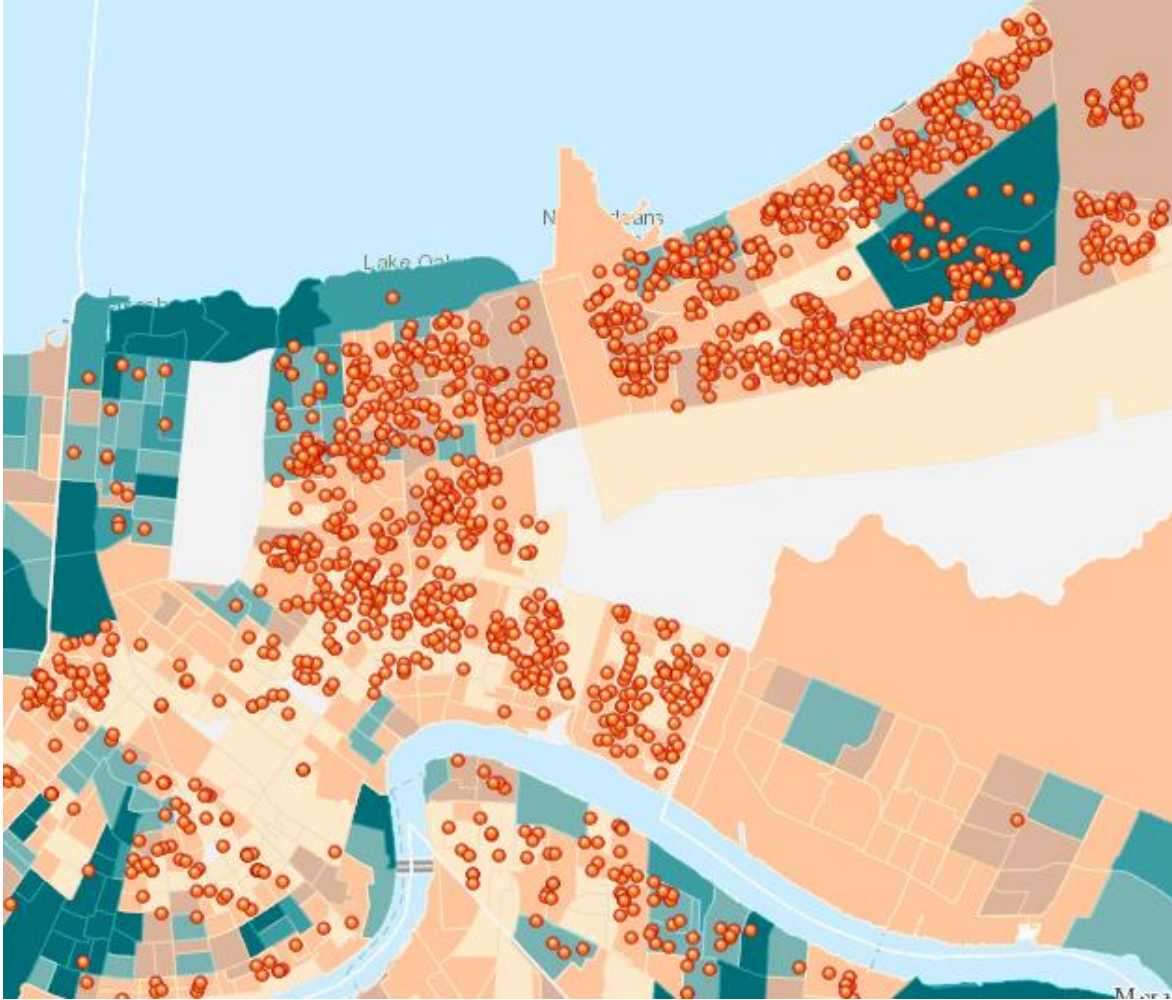


USA Median Household Income (Mature Support)

Median Household Income

Block Groups

- More than \$82,000
- \$68,001 to \$82,000
- \$53,001 to \$68,000
- \$39,001 to \$53,000 (US median: \$50,157)
- \$24,001 to \$39,000
- \$24,000 or less
- No households





“You never change things by fighting the existing reality.

To change something, build a new model that makes the existing model obsolete.”

— R. Buckminster Fuller

Beth Galante

Vice President of Business Development & Governmental Affairs

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