# Strategies for Improving Efficiency in Delivering Efficiency: Lightning Round (7 x 7)

Cynthia Adams, LEAP (VA) Larry Earegood, Consumers Energy (MI) John Schott, NYSERDA Gavin Hastings, Arizona Public Service Emily Salzberg, Washington State University Energy Adam Buick, Community Power Works (WA) Bob Knight, BKi





# Efficient and Effective Program Marketing: Leveraging the Utility Audit Program

ACI Lightning Round

Cynthia Adams, Executive Director, LEAP

### **Home Energy Checkup Fun Facts**

- Direct install residential utility audit program not connected to HPwES
- 1 2 hr home evaluation (no diagnostics)
- Utility pays up to \$250 a rebate to LEAP
- Homeowner pays \$45 to LEAP
- Entry into HPwES/Lead Gen for Network
- 1000+ since Q4 2013 launch



leap

#### **Issues We Faced**

How to generate and handle volume (3 / day / Energy Coach)?

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- Marketing
- Scheduling
- Collecting data
- Managing homeowner leads
- Enhancing the offer

#### **How We Overcame Them**

Sprint-style staff meetings to optimize process:

Marketing: community partnerships

 (outreach and social media channels, not traditional advertising)

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- Scheduling: online scheduler and geobatching (added 3 coaches and increased checkup volume from 8 to 12/wk)
- Collecting data: tablets and writeable pdfs (1 FTE + interns managing 2.5 coaches' packets, to 1 PTE managing 5.5 coaches' packets)
- Managing homeowner leads: CRM (Decentralized customer management for better communications with customers and contractors )
- Enhancing the offer: "cherries" (15% - 20% purchase CO detectors/filter locks; 7% radon detectors)

### **Results: \$256K in HPwES Support**

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- \$209K in utility rebates
- \$37K in homeowner fees
- \$10K in sales of cherries/add-on products (phased in Jan-Feb timeframe)
- Ave HO payment: \$38
- Ave rebate: \$206
- Ave inventory cost / job: \$40
- Enrolled 249 homeowners in HPwES
- 991 mWh in projected energy savings

#### Home Performance with ENERGY STAR® Improve Efficiencies Through Program Design

Larry Earegood Energy Efficiency Programs Manager



# **Program Lacked Identity and Efficiencies**

#### HPwES model launched:

- Included "optional" Home Performance Survey (HPS) – Visual audit performed by contractors
  - DIs left behind contributed to low installation rates
  - Upsell tactics elevated customer concerns, inquiries and complaints
- Included prescriptive insulation and window measures
- Large base of contractors to select from became overpowering and confusing





# **Condensed to Basics and Core Services**

- Improve customer participation, satisfaction and experience
  - Phased out HPS and instituted utility model Home Energy Analysis (HEA)
  - Separated prescriptive measures into separate Insulation and Windows program
  - Enhanced list of contractors
    - Reduced list to most active businesses
    - Launched robust Web-based "contractor finder tool"

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## **Impact and Results**



#### **Installation Rate Comparison** 1.2 1 0.8 0.6 0.4 0.2 0 CFL Low-flow Low-flow Faucet Pipe Wrap Showerhead Insulation Aerator Contractor Installed Utility Installed



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## **Benefits of New Model and Strategy**

- Improved DI installation rates through HEA
- Improved customer satisfaction and decreased number of inquiries and complaints
- Increased education on program offerings across portfolio versus program specific
- Separating programs allowed for increased accuracy in forecasting and predictability, fostering program continuity throughout year
- Pathway to participation became clearer, yet didn't compromise options





# Strategies for Improving Efficiency

A look into NYSERDA's software systems and automated approval process

John Schott



# **Market Transformation**



- 5,000,000 1-4 family homes
- 1-2% of building stock retrofitted annually
- 50k-100k annual retrofit goal



# 57,000 Retrofits Completed to Date





# Program Software Enhancements

**Benefits** 



**Project Approval Timeline** 

# Next Steps: Simplify the Process

What's the Goal? – Reposition the program to achieve 8,500 projects/year in the immediate term with annual growth of 15%

- Savings based incentive structure deemed vs. modeled?
- Adding new energy modeling software tools
- Automated approval process
  - Validates HPXML
  - Checks for minimum data requirements
  - Validates program requirements
  - Screens for savings reasonableness



# Deploying HPXML: Building a framework for the future

Gavin Hastings Arizona Public Service



# **Project Goals:**

## Drive costs out...

### ... while driving innovation in.

- Give contractor's choice in tools.
- Reduce transactional costs.
- Increase program flexibility.
- Accelerate program transparency, through better data.



#### **New APS Software Environment**



# Launched in Nov. 2013: over 2,000 HPXML transfers to date.



#### **Result of Our Efforts**

**Previous Software Environment** 



#### **New Software Environment**

#### + reduced administrative time per job by 31%



# **Things to Remember**

## Drive costs out...

## ... while driving innovation in.

- HPXML is a powerful tool and can be adapted to meet your needs.
- Aggressively pursue simplicity.
- Create systems that can evolve **with** the market.
- Data should not flow only one way.



Strategies for Improving Efficiency in Delivering Efficiency: Lightning Round

# **Program Delivery Efficiencies Through Automated Data Review**

ACI National Conference, April 30, 2014

**Emily Salzberg** Program Manager, WSU Energy Program

Phone: 360.956.2109

Email: <u>SalzbergE@energy.wsu.edu</u>

WASHINGTON STATE UNIVERSITY EXTENSION ENERGY PROGRAM

#### **Early Investments Pay Off — Do More with Less**

- Invest in data systems early to validate and refine program assumptions
- Make the administrator's role as easy as possible
- Add value, not burden, to programs delivered
- Replicate successful systems where it makes sense



#### **Multi-Tasking Audit Data**

**Challenge:** The RePower program offers services in a community with multiple challenges:

- Housing stock
- Workforce skills
- Quality assurance
- Program goals



**Approach:** Consolidated analysis of program data to identify key patterns:

- Profile of housing stock assessed and upgraded
- Potential for targeted marketing of candidate homes
- High-priority homes for on-site quality assurance
- Trends in auditor "errors" to indicate training needs

**REPOWER** 

#### **Program Efficiency Results**

#### Health and safety:

Combustion safety "flags" were used to:

- Identify workforce training needs
- Indicate high-priority QA homes



#### **Focused delivery:**

- Identified candidate homes for targeted marketing and upgrade conversion
- Revised incentive structure to target measure packages

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	Number of	total building
1	Durallings	in study
Issue:	Dweilings	
House Leakage	185	67% 52%
Attic Insulation	145	52%
Leaky Ducts	133	48%
Duct Insulation	67	24%
Wall Insulation	37	13%
Foundation Type/Insulation	35	13%
Windows	34	12%
(No issues identified)	20	7.2%
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#### Efficiency Across Community-Based Programs in Washington State

- The 10 community-based energy efficiency programs operating in the state focus on delivering high quality, multi-measure upgrades
- Data validation recommendations developed in RePower have been applied to programs statewide, including software audit data
- Efficiency in QA approach as programs move away from 100% site visit
- Audit error analysis used to identify statewide workforce training needs



**Community Energy Efficiency Program (CEEP) Service Areas** 

2013-2015



# Partnerships and Economies of Scale

Adam Buick Presented to ACI National Conference April 30, 2014





#### Partnerships are Worth It

Community energy efficiency programs **can** sustain without ARRA funding by identifying opportunities for collaboration, building strategic partnerships, and creating economies of scale





### Post-ARRA Challenges

#### Issue: How can OSE reduce program costs given post-ARRA funding constraints?



#### Challenges

- Many players, diverse interests
- High program costs
- SCL cost-effectiveness test
- Reduced funding
- Government program unsustainable

#### Approach

SCL and OSE contract with a single non-profit organization—Clean Energy Works—to operate:

- Community Power Works
- SCL Energy Audit Program
- SCL Single-family
   Weatherization Program



#### **Seattle Solution**

#### Issue: How can OSE reduce program costs given post-ARRA funding constraints?

Community Power Works is partnering with Seattle City Light and Clean Energy Works (Oregon) to bundle program offerings for customers and achieve economies of scale.

Expense Category	Reduced Costs
Program Design	Integrated design
Customer Service	Shared reps
Reporting	Data alignment
Evaluation	Shared fixed costs
Marketing	Bundled offering
Fund management	Flat transaction fee



# ming Challenges as Opportunities

- Look at players and gaps in the market as opportunities
- Collaborate and build trust with utilities from the beginning
- Demonstrate program value to stakeholders and funders
- Embed evaluation in a robust adaptive management strategy
- Focus on up-front and continued collaboration with stakeholders in decision-making process
- Don't be afraid of innovation
- Leverage co-benefits to access myriad funding sources





# Innovations to Simplify, Engage, and Access Capital

Strategies for Improving Efficiency in Delivering

Strategies for Improving Efficiency in Delivering Efficiency:

## Simplify: LA County Prescriptiverence 2014 Retrofits Features

- Multiple measures required, but without modeling
- Simplified points-based rebates per measure
- Incentives <=\$3000, \$10/point</li>
- Streamlined approval for projects and rebates

#### Results

NERGY • ECONOMICS • ENVIRON/

- Over 1,700 projects in first nine months
- Current goal is for 2000 more in a year

# Engage: CHERP Features

ERGY • ECONOMICS • ENVIRO

Strategies for Improving Efficiency in Delivering Efficiency:

(California Home Efficiency Retrofit Promotion program)

- Four target communities in LA County (pilot)
- Endorsements from local organizations, cities, and opinion leaders
- Training/managing volunteer networkers to engage homeowners in home retrofits

## Results

- Extensive volunteer networks in operation
- Active interest in communities statewide



Strategies for Improving Efficiency in Delivering Efficiency:

# Access Capital: HERO Residential Property Assessed Clean Energy (Features

- State loan loss reserve; loans bundled for resale
- Capital providers see reduced risk, new market
- Favorable financing (20 years, transferable)
- Variety of EE measures & solar allowed

#### Results

• 15,000 retrofits in Riverside County, no

ENERGY- ECONOMICS - ENVIRONMENT

Strategies for Improving Efficiency in Delivering Efficiency:

ACI National Conference 2014

# Simplify, Engage, and Access Capital: Efficiency PAYS<sup>®</sup>

#### **Features**

- Both water and energy savings, on-bill repayment
- Single- and multi-family buildings
- Self-funded, scalable program, no upfront cost
- Utility surcharge is less than total utility bill savings

#### Results

• Windsor, CA pilot: 5% of residences in 18



# **QUESTIONS?**