



**CITY OF CLEVELAND**  
Mayor Frank G. Jackson



OFFICE OF

**SUSTAINABILITY**

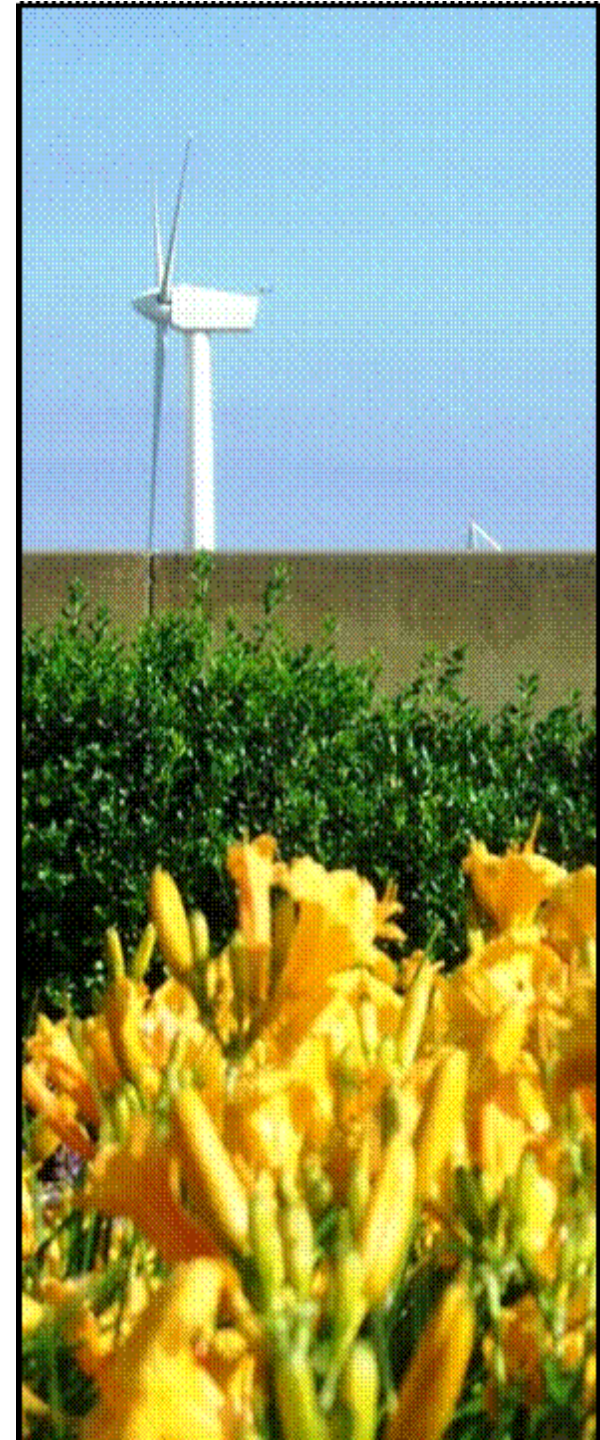
# Cleveland Energy\$aver Pilot Program

(From Pilot to Permanent Program)

July 10<sup>th</sup>, 2012

1:30pm- 3:00pm

Residential Energy Efficiency Solutions Conference 2012





# Office of Sustainability

- The Office launched in 2005; became part of Mayor's office in 2009
- Office goals:
  - Save the City of Cleveland money and reduce its ecological footprint
  - Use sustainability as a tool for economic development
  - Provide tools and resources to make sustainability business-as-usual within City departments, at home, and the workplace
  - Foster a culture that embraces sustainability action through education



*Mayor Frank Jackson*



# Cleveland Energy\$aver Pilot Program (CE\$)



- Pilot program aimed at reducing barriers to widespread adoption of residential energy efficient retrofits
  - Lack of Information
  - Access to Low-cost Capital
  - Comprehensive Audit-Retrofit Program
- Funded through Cleveland's Energy Efficiency and Conservation Block Grant (EECBG) Program
  - A program of the American Recovery and Reinvestment Act of 2009 (ARRA)

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# Cleveland Energy\$aver Pilot Program

## Energy Efficiency and Conservation Block Grant Program (EECBG)

In 2009, the City of Cleveland received \$4.5M to fund 11 project activities (14 distinct projects) related to energy efficiency and resource conservation

### Public Buildings:

- Lighting Retrofits;
- HVAC Upgrades/Radiant heating
- Utility Data Management System
- Solar-Thermal DHW Installation

### City Operations:

- LED Streetlights Pilot
- Recycling Projects
- Deconstruction Projects
- Climate Action Plan

### Community Oriented Projects:

- Energy Auditing Services:  
Commercial/Industrial Customers
- Energy \$aver Program: Residential Retrofit Pilot Project
- Downtown Bike Station and Bike Trails (Fuel Conservation)
- Sustainability Plan (SC 2019 Action Resources Guide)



# Cleveland Energy\$aver Pilot Program

Cleveland Energy\$aver Program is one of several residential home improvement programs/policies in the City and region:

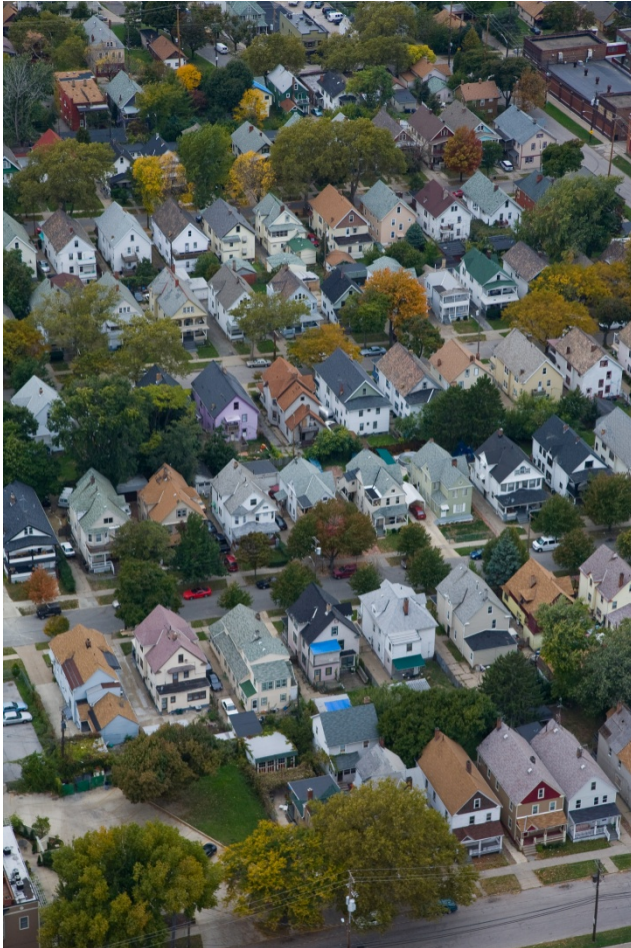
- Green Building Tax Abatement
- Home Weatherization Assistance Program (HWAP)
  - Warm & Healthy Homes
- Utility-Based Programs
  - House Warming
  - Good Cents Programs
- Model Green Blocks







# Cleveland Energy\$aver Pilot Program



- Program is primarily targeted to single-family households in the City of Cleveland with an annual income at 200% or more of the federal poverty standard
  - Residents that do not qualify for HWAP or other low-income weatherization programs
- Goal is to retrofit 100 homes within the pilot timeframe



# Cleveland Energy\$aver Pilot Program

## Program Partners:

- City of Cleveland Mayor's Office of Sustainability
- City of Cleveland Department of Community Development
- Cleveland Action to Support Housing (CASH)
- Cleveland Housing Network (CHN)
- Dominion East Ohio
- City of Cleveland Mayor's Office of Communications
- Clean Energy Solutions, Inc. (CESI) & CADMUS Group (DOE Technical Assistance Partners)





# Cleveland Energy\$aver Pilot Program

Program Overview:  
(from a resident's perspective)

## 1) Energy Assessment

Interested Residents contact CE\$ team to sign up for their initial energy audit

- Up front cost to homeowners is \$50 (over \$300 in savings)
- \$50 audit fee will be reimbursed if resident moves forward with retrofits





# Cleveland Energy\$aver Pilot Program



**ENERGY AUDIT & HOME PERFORMANCE ASSESSMENT**

PREPARED FOR:  
Robert Smith  
1051 Lorain Ave.  
Cleveland, OH 44109

PREPARED BY:  
Michael Thompson  
Building Performance Expert  
Phone: 216-235-7323  
Email: Mike.Thompson1@yahoo.com

March 20, 2012

**ENERGY USE SUMMARY**  
View the results of the proposed energy improvement in these three charts, which show estimates of the energy saved, your reduced carbon footprint, and the savings in your utility bills.

Category	Before	After
Yearly Energy Use (kWh)	~1500	~1000
Yearly Carbon Footprint (tons)	~12	~8
Yearly Utility Bill (\$)	~3000	~2000

**YOUR ATTIC AND CEILING INSULATION**

The effectiveness of insulation is based on its "R-value", the standard measure of thermal resistance. Higher R-values result in slower heat loss, lower heating bills, and a more comfortable and healthier home. attic insulation is almost always the first priority in terms of a practical, cost-effective improvement to a home. Installing the right amount of attic insulation typically a minimum of R-30 but often R-50 is a key to reducing heating and cooling costs.

Area	Type	Depth	R-value	Action	Save
ATTIC	None	0 in.	0	Add Type: R-49 Cellulose Loose Blown; CE3 Depth: 10 in.; R-value: 49	an estimated 5.7% on your energy use.
	Fiberglass	2 in.	4	Add Type: Cellulose Depth: 5.5 in.; R-value: 20	an estimated 2.8% on your energy use.

2000 Payne Ave., Suite 110  
Cleveland, Ohio 44114  
www.clevelandenergysaver.com  
Phone: 216-472-5225  
Fax: 216-464-4114

## 2) Energy Audit Report

Residents receive a detailed energy assessment highlighting the areas in their home with the greatest potential for energy savings

Report includes:

- Energy efficiency upgrade measures to reduce energy consumption/loss
- EECEBG and utility rebates
- Estimated ROI for each EE measure



# Cleveland Energy\$aver Pilot Program

## 3) Bid Retrofit Work

Residents can obtain quotes from a list of CE\$ approved contractors

- Biggest constraint in program process
- CE\$ team is working to improve the turnaround time from energy audit to retrofit
  - Includes opportunity tracking/follow ups
  - Automated scheduling tool for contractors



# Cleveland Energy\$aver Pilot Program



## 4) Schedule/Perform Retrofit Work

Examples of upgrades include\*:

- Air Sealing
- Insulation
- Furnace Replacement
- New Windows/Doors

\*Some restrictions on what work can be performed under the EECBG program



# Cleveland Energy\$aver Pilot Program

## 5) Incentive/Rebate Processing

CE\$ team works with residents to process rebates and incentives for energy audits (refunding their initial \$50) and retrofit work





# Cleveland Energy\$aver Pilot Program



**CLEVELAND  
ACTION TO  
SUPPORT  
HOUSING**

## Program Financing

Low-interest financing is available for qualified residents interested in moving forward with retrofits

- Loans processed through CASH, Inc. and their lending partners
- 2.3% interest rate

Three types of residents:

- Self financed
- Tier One
- Tier Two





# Cleveland Energy\$aver Pilot Program

## Program Financing

2.3% Fixed Interest Rate (for Tier One or Tier Two borrowers)

Minimum Loan Amount: \$3,000

Maximum Loan Amount: \$12,000

Estimated Average Loan Size: \$6,500

Loan Term: Up to 12 years

## Tier One Borrowers:

- Loans issued through CASH's lending partners  
Huntington Bank, Dollar Bank and Key Bank
- Residents meet the qualifications for CASH's lending partners:  
680+ FICO score



# Cleveland Energy\$aver Pilot Program

## Program Financing

### Tier Two Borrowers:

- Residents that do not qualify for Tier One loans, may be eligible for Tier Two loans
- Loans issued and managed through CASH, Inc.
- Expanded Underwriting Criteria:
  - FICO score below 680 (640 minimum)
  - 45% maximum Debt-to-Income ratio
  - 110% maximum Loan-to-Value ratio
- Loans are backed by a \$100,000 Loan Loss Reserve (LLR)



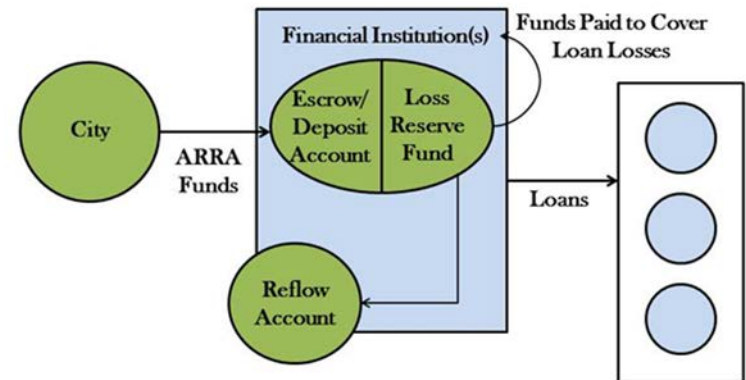
# Cleveland Energy\$aver Pilot Program

## Loan Loss Reserve:

(for Tier Two Loans)

- Funded through the EECBG Program
- Includes Escrow, Reserve and Reflow Accounts managed by CASH, Inc.
- LLR is initially equal to 50% of the potential loan pool
  - \$100,000 to support a loan pool of \$200,000
  - Could support approximately 30 Tier Two loans (avg. size \$6,500)

## Loan Loss Reserve Fund - Structure





# Cleveland Energy\$aver Pilot Program

## Loan Loss Reserve:

- Because the LLR is funded through the EECBG program, retrofit work financed by Tier Two loans is limited to eligible activities under the EECBG program
- Project teams refer to our DOE/EECBG scope, EECBG Historic Preservation Programmatic Agreement and NEPA approved scope of work
- If necessary, funds can be allocated from the LLR to support additional marketing efforts, rebates/incentives and loan processing costs



# Cleveland Energy\$aver Pilot Program

## Program Successes to Date\*:

Audits Performed: 96 (20 more scheduled)

Retrofits Completed: 6 (4 in progress)

Total Cost of Completed Retrofit Work: \$44,370

Total Value of Rebates/Incentives: \$14,336 (\$8,874 EECBG funded)

Tier One Loans Issued: 8

Tier Two Loans Issued: 1

Total Value of Loans Issued: \$75,729



\*As of July 6<sup>th</sup>, 2012





# Cleveland Energy\$aver Pilot Program

Program Successes to Date:

Improved program process to decrease the time from audit to retrofit

- Better tracking of resident status and opportunities
- Improved scheduling with contractors through the IRATE system

Utility rebates offer increased savings

Trained and certified program contractors

Three new positions created within CHN for CE\$

Assessment Schedule										
Homeowner Name	Date of Assessment	Time	Assessment Complete	Report Complete	Applying for Loan	Self Financing	Obtaining Bids	Undecided	Not Moving Forward	Job Complete
1   Chuck Ackerman			★	★	★	★				★
Week of January 30 - February 5										
2   Rodney Gallaway	1/30/12	5:30 PM	★	★	★					★
Week of February 6 - 12										
3   Nikki DiFilippo	2/6/12	8:00 AM	★	★		★				★
4   Kathy Hatfield	2/6/12	1:00 PM	✗	✗					✗	
5   Jermaine Tolbert	2/7/12	8:00 AM	✗	✗					✗	
6   John Anonieto	2/8/12	8:00 AM	✗	✗			✓			
Week of February 13 - 19										
7   Paul Ettore	2/13/12	8:00 AM	✗	✗	✓		✓			
8   Cynthia Anderson	2/17/12	1:00 PM	✗	✗				✓		
Week of February 20 - 26										
9   Isai Wimbiscus	2/20/12	9:00 AM	✗	✗	✓		✓			
10   Jason Schneck	2/20/12	11:30 AM	✗	✗				✓		
11   Jeanne Morton	2/21/12	10:00 AM	★	★	★					★
12   Msily Marna	2/21/12	12:30 PM	✗	✗						
13   Michael McBride	2/22/12	1:00 PM	✗	✗			✓			
14   Tom Knittel	2/23/12	9:00 AM	✗	✗			✓			
15   Damon Taseff	2/24/12	9:00 AM	✗	✗			✓			
16   Jennifer Deering	2/25/12	9:00 AM	✗	✗			✓			
17   Evan Simpson	2/25/12	10:50 AM	✗	✗		✓	✓			
Week of February 27 - March 4										
18   Mary Vida Kuhn	2/27/12	9:00 AM	✗	✗	✗		✓			
19   Michelle Davis	2/28/12	4:00 PM	✗	✗	✗		✓			
20   Barbara Opatry	2/28/12	9:00 AM	✗	✗	✗		✓			
21   Kate Monter Durban	2/28/12	6:00 PM	✗	✗	✗		✓			
22   Sarah Ryznar	2/29/12	7:00 PM	✗	✗			✓			
23   Ed George	3/2/12	1:00 PM	✗	✗	✓			✓		
24   Ann Marie Bergman	3/3/12	9:00 AM	✗	✗				✓		
Week of March 5 - 11										
25   Steve Lorenz	3/5/12	9:00 AM	✗	✗				✓		
26   Tomi Rodriguez	3/7/12	10:00 AM	✗	✗	✓		✓			
27   Lynn Phares	3/7/12	1:00 PM	✗	✗					✗	
28   Kevin Yates	3/8/12	9:00 AM	✗	✗					✗	
29   Jack Devar	3/8/12	10:00 AM	✗	✗					✗	
30   Yvonne Lamar	3/9/12	9:00 AM	✗	✗				✓		✗



# Cleveland Energy\$aver Pilot Program

## Program Opportunities:

- Low-cost energy audits to identify priority areas for upgrades
- Guidance from CE\$ team to help make upgrade selections
- Significant discounts for residents for retrofit work (up to 40%)
- Relationships with CASH, Inc. and their lending partners (low-interest financing options)
- Good data generated from the program beyond the basic impact metrics
  - Includes loan information and resident utility data after the upgrade work



# Cleveland Energy\$aver Pilot Program

## Program Challenges:

- Program Design and Contracting
  - Some challenges getting the program off the ground
  - Assistance from DOE's TAP partners to help structure the program and LLR
- Improving Program Process
  - Decreasing the time from audit to retrofit
- Promotion/Improving Program Participation
  - Need to encourage more residents to sign up for audits to help reach program goals (100 retrofits)



# Cleveland Energy\$aver Pilot Program

## Program Challenges Beyond the Pilot:

- Managing funds in the Loan Loss Reserve after the pilot
  - Waiting on guidance for how to manage/report on funds once the pilot program is complete
  - Recommendations from DOE's TAP partners suggest spending down these funds (rebates, incentives, marketing, etc.), rather than rolling them into another LLR or revolving fund
- Ongoing Funding
  - For program management as well as rebates and incentives
- Maintaining relationships with lending partners to continue offering low-interest loans for the program
- Maintaining Program Participation into the future
  - Potentially open the program up to multi-family units, small businesses, etc.



# Cleveland Energy\$aver Pilot Program

Questions??





# Thank You!

## **Kristin Hall**

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## **For more information visit:**

[www.ClevelandEnergySaver.com](http://www.ClevelandEnergySaver.com)  
[www.city.cleveland.oh.us/sustainability](http://www.city.cleveland.oh.us/sustainability)  
[www.cleveland2019.org](http://www.cleveland2019.org)

