

Webinar Series:

Energy Efficiency and Conservation Loan Program

With Experts from Electric Cooperatives and
the U.S. Departments of Agriculture and Energy



U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy

Webinar #4 of 6: **Residential Energy Efficiency** **Part Two**

Gerard Moore, USDA, Rural Utilities Service, Acting Deputy Assistant Administrator of the Electric Program

Amy Bryan, Jackson Electric Membership Corporation, Residential Marketing Director

Danielle Sass Byrnett, U.S. Department of Energy, Better Buildings Residential Programs

Odette Mucha, US Department of Energy, Stakeholder Engagement



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Webinar Series sneak peek

NEXT WEBINAR: On-Bill Financing

January 8th 3:00 pm EST

Featured speakers from the first 2 EECLP applicants:

> **Curtis Wynn, Roanoke Electric, CEO**

> **Sherry Jackson, North Arkansas Electric Cooperative, Member Service Coordinator**

> **Greg Leventis, Lawrence Berkeley National Laboratory, Electricity Markets and Policy Group**

Register now! <https://www1.gotomeeting.com/register/230715008>



U.S. DEPARTMENT OF
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Energy Efficiency &
Renewable Energy

Energy Efficiency and Conservation Loan Program (EECLP)

Rural Utilities Service
Electric Program
US Department of Agriculture

For Additional Information

Please visit our website at: http://www.rurdev.usda.gov/UEP_EECLP.html

Or Gerard.moore@wdc.usda.gov 202-720-6285

- ▶ For more information on the Final Rule, you may download the following information here:
- ▶ [Press Release](#)
- ▶ [Final Rule](#)
- ▶ [Background PowerPoint Presentation](#)
- ▶ [Presentation](#)
- ▶ [Toolkit](#)
- ▶ Current Electric Program Borrowers should reach out to the Electric Program [General Field Representatives](#) for additional information and how to apply.

A large, glowing lightbulb is the central focus, tilted slightly to the left. The bulb's glass is filled with a vibrant landscape scene featuring a tall, thin tree in the foreground, a grassy field, and a blue sky with white clouds. The background of the entire slide is a blurred field of white wind turbines under a bright sky. A dark blue horizontal bar with rounded ends is positioned across the middle of the lightbulb, containing the title and date. A dotted white line runs horizontally across the bar, separating the title from the date.

Jackson EMC

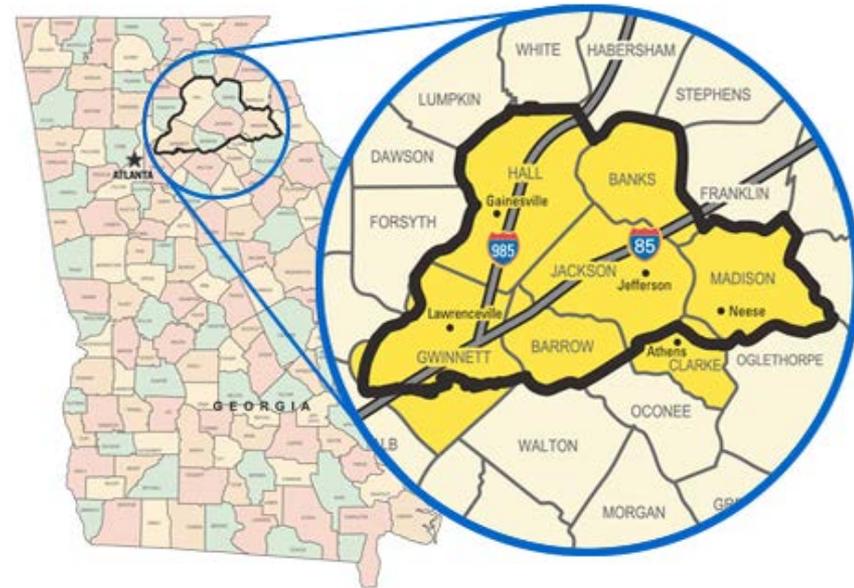
December 18, 2014

Agenda

- Jackson EMC Overview
- History of Programs
- Manpower
- Current Existing Home Programs
 - Audits and high bills
 - Rebates and loans
 - Tracking and reporting
- Marketing and advertising

Welcome

- Located in Georgia 215,000 meters
- Serve fast growing area
- Dedication to energy efficient programs and services
 - Customer satisfaction
 - Revenue
 - Strategic load growth



History of Energy Efficient Home Programs

Timeline of Programs



Existing Home Audit Tools

Service	Years
Walk-through and high bill	50+
Online energy education	20+
Do-it-yourself online and mail out kit	20+
Home Performance with ENERGY STAR	13
CSR and MSR online tools	10

Manpower

- 4 district offices serve residential members (manpower/members)
 - Lawrenceville – 3, 106,000
 - Jefferson – 2, 25,000
 - Gainesville – 2, 25,000
 - Neese – 1, 15,000
 - Corporate – 2

- Focus existing home programs

- Strategy



Existing Home Audits



Do-It-Yourself Energy Evaluations

Home Fitness Monitor
jacksonemc.com/monitor

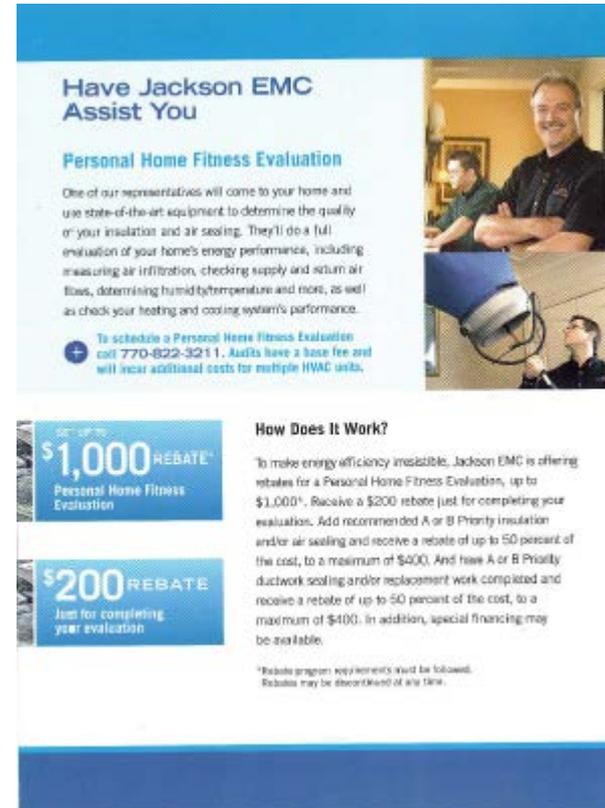
Everything is available at the click of the mouse. This interactive analysis provides personalized reports about your home's energy use, along with recommendations on ways to save energy. On this section of our web site, you'll get cost-saving suggestions to reduce your energy bill, and determine where your energy dollars are going.

Home Fitness Checkup Kit

Have this Do-It-Yourself Kit sent directly to your home. Complete with video and literature, the kit walks you through a checklist to help examine your home and identify potential problems. The information also provides suggestions to improve your home's energy efficiency and reduce your energy bill.

+ To start saving money and improve your home's comfort, visit jacksonemc.com/energyfit

Do-It-Yourself Energy Evaluations



Have Jackson EMC Assist You

Personal Home Fitness Evaluation

One of our representatives will come to your home and use state-of-the-art equipment to determine the quality of your insulation and air sealing. They'll do a full evaluation of your home's energy performance, including measuring air infiltration, checking supply and return air flows, determining humidity/temperature and more, as well as check your heating and cooling system's performance.

+ To schedule a Personal Home Fitness Evaluation call 770-822-3211. Audits have a base fee and will incur additional costs for multiple HVAC units.

How Does It Work?

To make energy efficiency irresistible, Jackson EMC is offering rebates for a Personal Home Fitness Evaluation, up to \$1,000*. Receive a \$200 rebate just for completing your evaluation. Add recommended A or B Priority insulation and/or air sealing and receive a rebate of up to 50 percent of the cost, to a maximum of \$400. And have A or B Priority ductwork sealing and/or replacement work completed and receive a rebate of up to 50 percent of the cost, to a maximum of \$400. In addition, special financing may be available.

*Rebate program requirements must be followed. Rebates may be discontinued at any time.

Home Performance Testing
Personal Home Fitness Evaluation

JACKSON EMC'S GUIDE TO REBATES & INCENTIVES

Get Energy Fit

Jackson EMC Programs

Jackson EMC offers special financing and rebates to encourage members to use highly efficient technologies. Visit jacksonemc.com/save for details.

****Call before installation for rebate eligibility. All rebates are subject to change at any time.**

HURRY!

**FALL
SPECIAL
OFFER!**

For a limited time,* get a **\$400 rebate** when you replace your electric heat pump with an **ENERGY STAR®** rated electric heat pump**.

* From Sept. 1, 2014 through Dec. 21, 2014, or until funds are depleted.
** 14 SEER package and 15 SEER split systems.

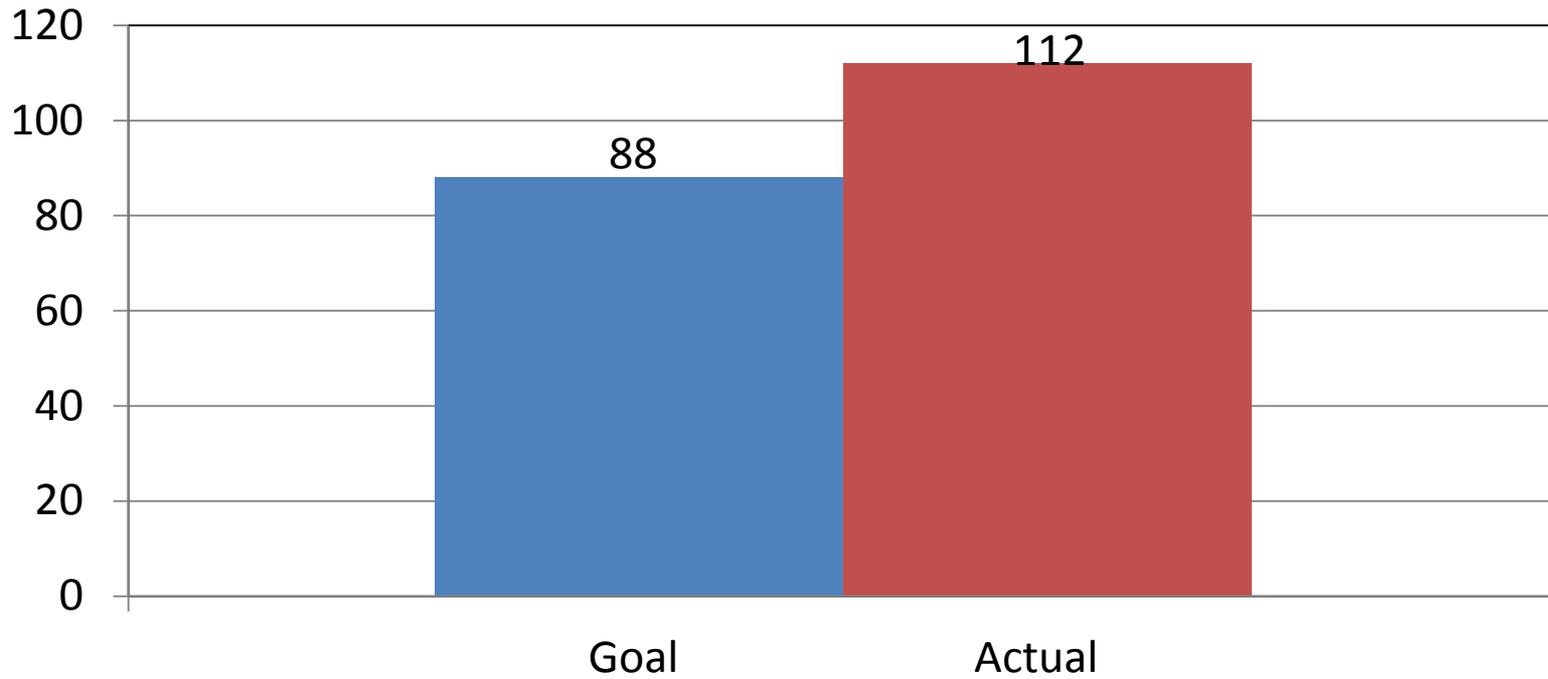
 <p>LOW INTEREST HomePlus LoansSM</p> <p>FOR ENERGY EFFICIENT IMPROVEMENTS</p> <p>Jackson EMC offers low interest financing for energy efficient improvements through a strategic partner.</p>	 <p>ENERGY AUDIT</p> <p>GET UP TO \$1,000</p> <p>Personal Home Fitness Evaluation</p>
 <p>INSULATION & AIR SEALING</p> <p>UP TO A \$400 REBATESM</p> <p>For Insulation and Air Sealing if recommended by the ENERGY STAR® Audit (Up to 50% of cost per home)</p>	 <p>DUCT SEALING & REPLACEMENT</p> <p>UP TO A \$400 REBATESM</p> <p>For Duct Sealing and Replacement if recommended by the ENERGY STAR® Audit (Up to 50% of cost per home)</p>
 <p>ELECTRIC HEAT PUMP REPLACEMENT</p> <p>\$400 REBATESM</p> <p>ENERGY STAR® Rated Electric Heat Pump (14 SEER package & 15 SEER split systems)</p>	 <p>HEAT PUMP WATER HEATER REPLACEMENT</p> <p>\$500 REBATESM</p> <p>ENERGY STAR® Rated Heat Pump Water Heater</p>
 <p>MARATHON WATER HEATER REPLACEMENT</p> <p>\$500 REBATESM</p> <p>Marathon Water Heater</p>	 <p>SOLAR WATER HEATER</p> <p>\$500 REBATESM</p> <p>ENERGY STAR® Rated Solar Thermal Water Heater</p>

LOANS *Loans up to \$5,500 for 36 months. Qualification is based on an assessment of individual creditworthiness and the underwriting standards of GEMC Federal Credit Union. All Credit Union loan programs, rates, forms, and conditions are subject to change at any time without notice. Limited time offer until funds are exhausted. **REBATES** ** Call before installation for rebate eligibility.

- Home Diagnostic Solutions
- Participating Contractor Network
- GEMC Federal Credit Union
- Field Verifications
- Quality Control Inspections
- Software
 - Field audits
 - Rep activity
 - Rebate payment
 - CRM (in progress)

Loans

October 31, 2014



*18 loans approved but not closed

**MARKETING REPORT
MONTH ENDING NOVEMBER 30, 2014**

RESIDENTIAL T.E.

	Annual Goal	YTD	% of Goal
Gain	686	528	77%
Jeff	456	366	80%
Gwin	431	452	105%
Neese	87	74	85%
Total	1,660	1,420	86%

All program payments

% ELECTRIC SATURATION

Annual Goal New Connects	Annual % TE New Connects	Annual % TE & Water Heater Only
64%	95%	95%
77%	88%	88%
65%	61 %	65%
95%	100%	100%
65%	78%	79%

All single family, multi-family and manufactured homes.

Monthly Dashboard

ENERGY AUDITS

	Goal	YTD	% of Goal
Gain	535	707	132%
Jeff	750	1,125	150%
Gwin	928	1,718	185%
Neese	150	327	218%
Total	2,363	3,877	164%

Includes energy audits, do-it-yourself audits, online audits, and high bill complaints.

INFORMATION REQUESTS

Audit Video Kit	540
Credit Union	26
Budget Billing	52
Home Security	37
Right Choice Programs	68
Senior/Handicapped Discount	64
Solar	36
Ways to Save Energy	380
Other	512
Total	1,715

WATER HEATER

	Annual Budget	YTD	% of Goal
Electric Water Heater	1,605	1,071	67%

LOANS

	Goal	NUMBER OF LOANS	\$ AVAILABLE	\$ UTILIZED
HomePlus	88	112	\$484,000	\$558,177
ERC	12	12	\$804,000	\$50,217

SALES GOALS

	Goal	Actual	% of Goal
Total Electric	906	2,040	225%

Tracking and Reporting

Jackson EMC DSM/EE Analysis - Summary

Measure	Total Resource Cost Result	Rate Impact Measure Result	Participant Cost Test Result
Water heater	11.88	.18	16.74
Water heater DR	7.60	6.46	N/A
Heat pump upgrade	2.59	0.65	2.65
Air conditioning DR	6.88	4.06	N/A

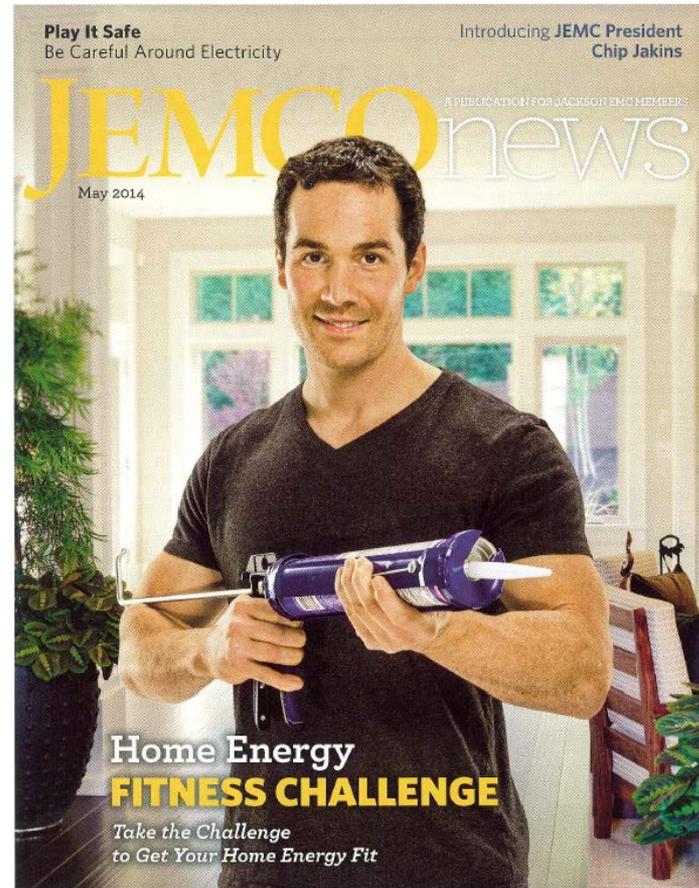
Tracking and Reporting

Jackson EMC RUS Reporting

Measure	Total Annual kWh Savings	Annual MMBtu Savings
Water heater	138,369	1,000
Heat pump upgrade	439,461	3,176

Home Energy Fitness Challenge

- Increase customer interest
- Make the phones ring
- Add fun to the process

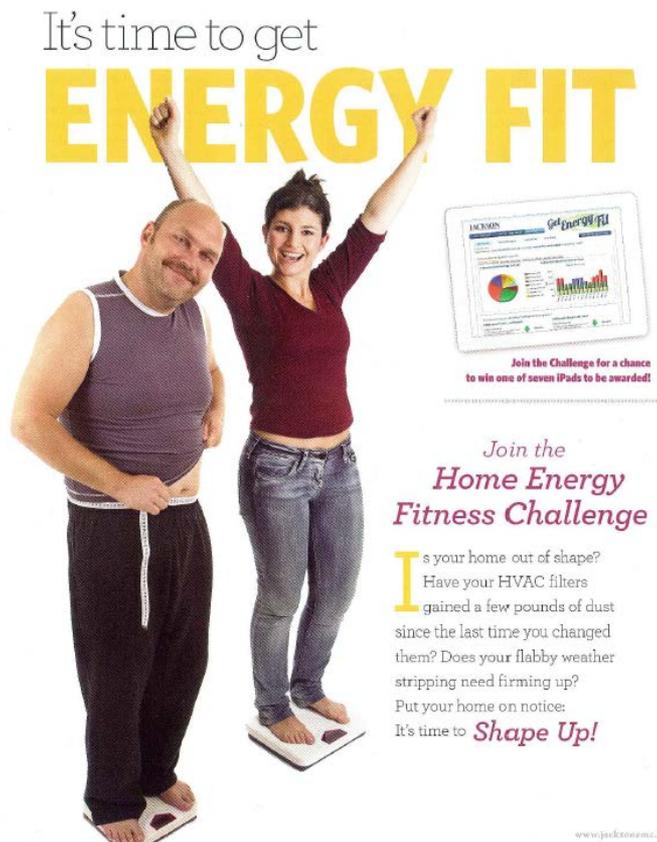


Home Energy Fitness Challenge

- Summer months
- Directed to website
- Contest atmosphere with prizes

Feature

It's time to get
ENERGY FIT



Join the Challenge for a chance to win one of seven iPads to be awarded!

Join the
Home Energy Fitness Challenge

Is your home out of shape? Have your HVAC filters gained a few pounds of dust since the last time you changed them? Does your flabby weather stripping need firming up? Put your home on notice: It's time to **Shape Up!**

www.cjacksoninc.com

It's time to get Energy Fit

Enter the Challenge to start tracking your energy savings!

Enter the Challenge

Get started in 3 simple steps.



How to enter:

Go to the Home Fitness Monitor and...

1. Sign up for Track My Progress.

When you click the "sign up" button in step one you'll automatically be directed to...

2. Create your Home Profile for your personal Energy Report.

After you view your report select the "Create A Plan" tab. There you can...

3. Set energy saving goals to create your own Energy Fitness plan.

When you've completed all three steps, you'll receive monthly progress emails so you can track your progress against your goals.

Record ID: 2642941

Your Question: I am interested in viewing or printing a comprehensive report of my energy usage!

Where are my energy dollars going?

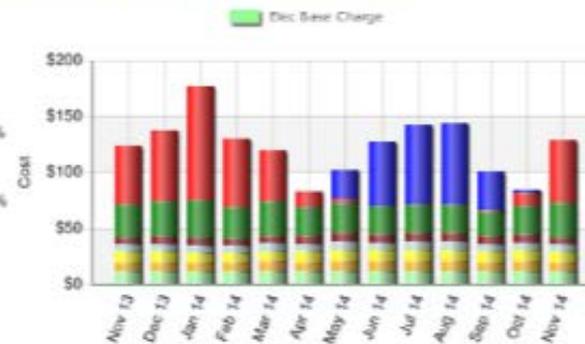
[Electric Cost Chart](#)
[Electric Cost Table](#)
[Electric Use Chart](#)
[Electric Use Table](#)

Estimated Annual by End Use



- Cooling: 19.7%
- Heating: 26.7%
- Water Heat: 24.7%
- Cooking: 6.4%
- Refrigeration: 6.0%
- Lighting: 8.8%
- Appliances: 7.7%

Estimated Monthly Electric Cost



Why are my energy costs different from last month or last year?

Difference from Last Month

Usage Summary:

The November 2014 usage was about 617 kWh higher than the October 2014 period.



617 kWh

Cost Summary:

The November 2014 costs were about \$45 higher than the October 2014 period.



\$45

Difference from Last Year

Usage Summary:

The November 2014 usage was about 79 kWh higher than the November 2013 period.



79 kWh

Cost Summary:

The November 2014 costs were about \$6 higher than the November 2013 period.



\$6

The Carrot



iPad Giveaway: June – August

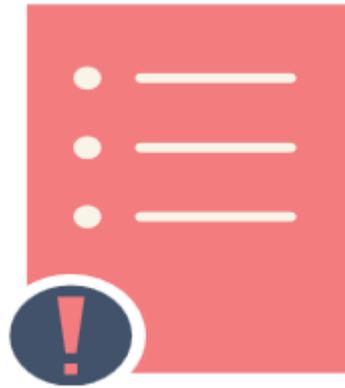
- 7 iPads
- Must click “sign-up”
- Random drawing



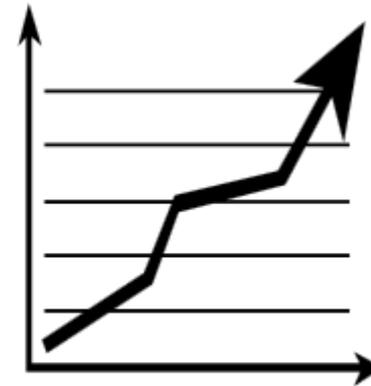
Results Summer



450 sign-ups



5X progress reports



30% increase online audits

The Next Steps

Heating Season Contest: December – February



Get Energy Fit & Win a \$1,000 Shopping Spree!

ENTER FOR A CHANCE TO WIN!

\$1,000 Academy Sports + Outdoors

Fitbit Flex

JOIN THE HOME ENERGY FITNESS CHALLENGE

Visit jacksonemc.com/challenge

Join the Home Energy Fitness Challenge to be automatically entered to WIN one of three \$1,000 SHOPPING SPREES at Academy Sports + Outdoors. Fifteen winners will also win a Fitbit Flex. Prize drawings take place April 1st.

JACKSON
ELECTRIC MEMBERSHIP CORPORATION™
jacksonemc.com

*Some restrictions apply. Must be a Jackson EMC member to enter.

Goals-

- Streamline sign-up process
- Involve more marketing channels
- Overcome internal barriers
- Repeat summer and winter

Save Energy & Money

- Home Fitness Monitor
- DIY Home Fitness Checkup Kit
- Rebates, Incentives & Loans
- Personal Home Fitness Evaluation
- Energy Fitness Guides
- Home Energy Library
- Home Fitness Plan
- DIY Energy Projects
- Energy Saving Rates
- Right Choice Homes
- Videos
- ENERGY STAR
- Sun Power Rebates
- Filter Change Program
- Join the Home Energy Fitness Challenge

Join the Home Energy Fitness Challenge

Get Energy Fit and WIN!

Enter the Challenge for a chance to win a **\$1000 shopping spree at Academy Sports + Outdoors** or a Fitbit Flex.

[Enter the Challenge](#)

Get started in 3 simple steps.



ENTER FOR A CHANCE TO WIN A
\$1,000 SHOPPING SPREE



How to enter:

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1. Sign up for Track My Progress.

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2. Create your Home Profile for your personal Energy Report.

After you view your report select the "Create A Plan" tab. There you can...

3. Set energy saving goals to create your own Energy Fitness plan.

When you've completed all three steps, you're automatically entered in the Home Energy Fitness Challenge Sweepstakes and eligible for prizes.

Details

Three first-place winners will receive a **\$1000 shopping spree at Academy Sports + Outdoors** to spend on equipment, clothing or tools to help them reach their fitness goals.

Fifteen winners will receive a **Fitbit Flex** activity and sleep monitor. Drawings for all prizes will take place April 1.

[Take the Challenge!](#)



ENTER FOR YOUR CHANCE TO WIN!

It's Time to Get Energy Fit!

Questions?

Amy Bryan

Director Residential Marketing

706-367-6111

abryan@jacksonemc.com





Residential Energy Efficiency Program Resources, Part 2

Danielle Sass Byrnett

U.S. Department of Energy

Results from Last Week's Webinar Poll

What do you want to hear more about?

	# of votes	% of votes
Data Collection & Evaluation	64	33%
Financing	53	27%
Working with Contractors	36	19%
Outreach & Marketing	34	18%
Other	7	4%
Total	194	100%

Resources for You – energy.gov/rpsc

	Other Webinars	Today's Deep Dive
Data Collection & Evaluation	<ul style="list-style-type: none"> • EECLP Webinar 1: Overview & Cost Effectiveness • EECLP Webinar 2: Evaluation, Monitoring & Verification 	<ul style="list-style-type: none"> • Continuous Improvement • Energy Data
Financing	<ul style="list-style-type: none"> • EECLP Webinar 5: On Bill Financing (1/8/15) 	<ul style="list-style-type: none"> • Partnering with Financial Institutions
Working with Contractors		<ul style="list-style-type: none"> • Quality Assurance
Outreach & Marketing		<ul style="list-style-type: none"> • Community-Based Outreach
Other		<ul style="list-style-type: none"> • Pro forma Tool

Overview of Better Buildings Residential Program Solution Center

Better Buildings Residential Program Solution Center

The Solution Center helps residential energy efficiency programs and partners:

- Minimize trial and error to achieve success
- Plan, operate, and evaluate their programs
- Access a living repository of examples, lessons, and resources

energy.gov/rpsc

Explore by Program Component



Explore the Solution Center

More than 50 handbooks & hundreds of examples

Overview

Strategy Development

- Assess the Market
- Set Goals & Objectives
- Identify Partners
- Make Design Decisions

Planning

- Develop Implementation Plans
- Develop Evaluation Plans

Implementation

- Develop Resources
- Deliver Program

Evaluation

- Assess & Improve Processes
- Communicate Impacts



Users can find:

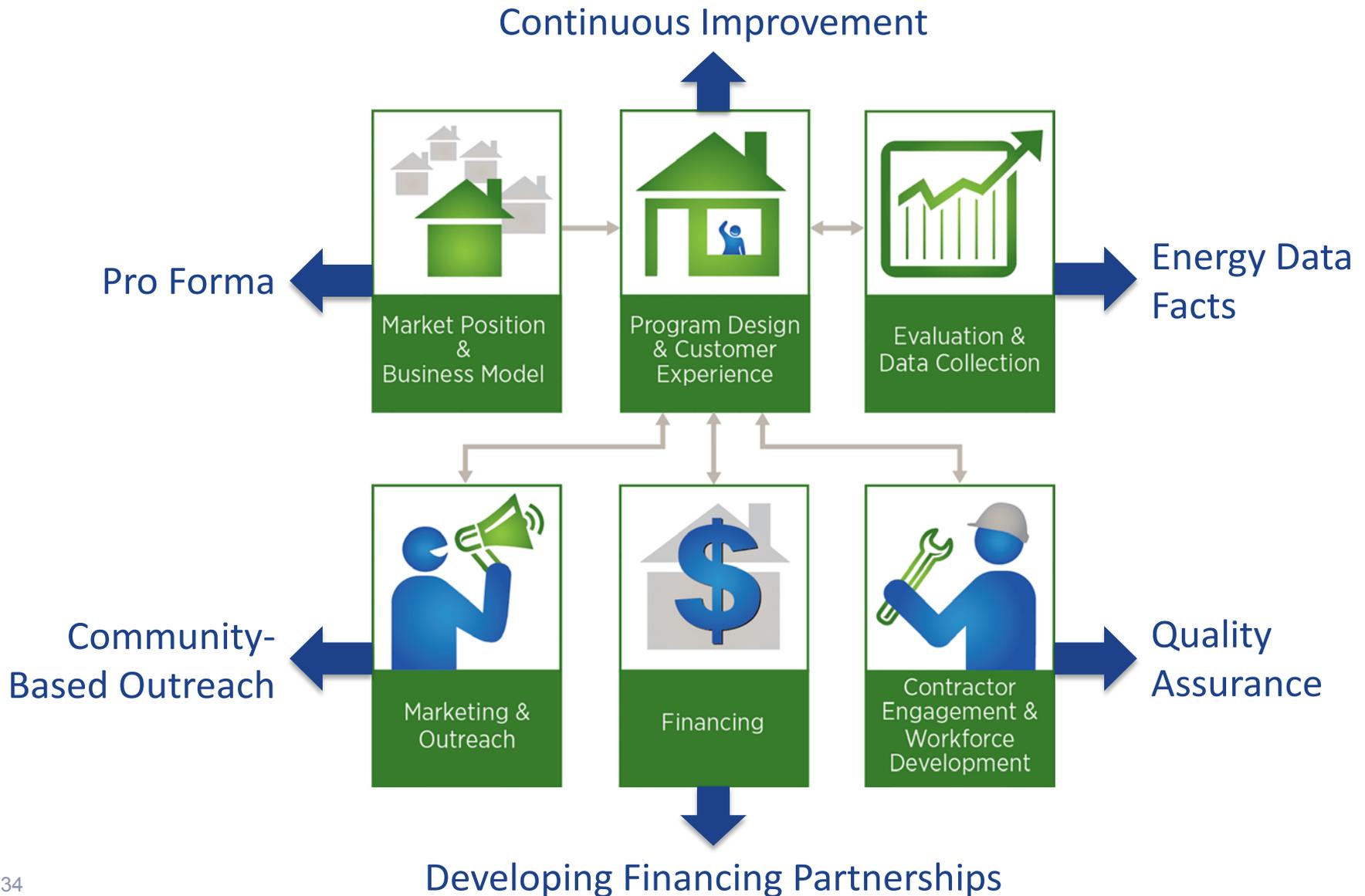
- Step-by-Step Guidance
- Tips for Success
- Examples
- Tools and Templates
- “My Favorites” Tagging
- Email Updates for New Content
- Opportunities to Feature Your Materials

Search by:

- Program Component
- Program Design Phase
- Organization or Program
- State or Territory
- Customer Income
- Neighborhood Type
- Building Sector

Deep Dive into Program Design

Six Components



Go to the Solution Center

<http://energy.gov/rpsc>

Use Case Example – Organization Pro Forma (Market Position & Business Model)

Pro Forma Tool

Market Position & Business Model – Assess & Improve Processes

[Where Am I?](#)

 [PDF of handbook](#)

 [Print handbook](#)

Description Step-by-Step Tips for Success Examples **Toolbox** Topical Resources

Toolbox

The following resources are available to help design, implement, and evaluate possible activities related to this handbook. These resources include templates and forms, as well as tools and calculators. The U.S. Department of Energy does not endorse these materials.

Templates & Forms

None available at this time.

Tools & Calculators

[Draft Contractor Pro Forma Tool](#)  (1023 KB)

Author: National Home Performance Council

Publication Date: 2012

Tool to evaluate contractor impacts on program revenue.

[Best Practices Self-Benchmarking Tool for Energy Efficiency Pro](#)

Author: Pacific Gas and Electric Company

Publication Date: 2013

The Best Practices Self-Benchmarking Tool can be used to identify needs, and strategies for improving them, based on the results.

	A	B	C	D	E	F
1						
3		Jan	Feb	March	April	May
5	Participating Contractors:	5	6	6	7	7
7	Leads	100	124	129	154	160
8	Audits	39	49	51	61	64
9	Retrofit	16	20	21	26	27
12	Total Industry Revenue	\$103,645	\$132,403	\$143,642	\$180,536	\$196,499
15	Industry Net (Profit / Loss)	(\$165,925)	(\$107,371)	(\$86,181)	(\$114,479)	(\$91,668)
18	Crew Jobs	6	7	8	10	11
19	Project Management	1	1	2	2	2
20	Auditing Jobs	6	8	8	10	10
21	Overhead	0	0	0	0	0
22	Total Jobs Created	13	17	18	22	23
24	Program Revenue / Month	\$9,250	\$11,536	\$12,087	\$14,525	\$15,238
27	Industry Lead Capacity	40	50	52	63	66
28	Marketing Model Supply	38	41	46	50	55

Use Case Example – Continuous Improvement (Program Design & Customer Experience)

Continuous Improvement

Program Design & Customer Experience – Assess & Improve Processes

[Where Am I?](#)

 [PDF of handbook](#)

 [Print handbook](#)

Description

Step-by-Step

Tips for Success

Examples

Toolbox

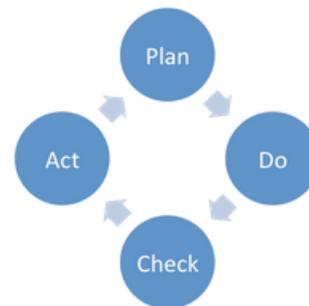
Topical Resources

Description

As you implement your program, you will want to regularly assess the efficiency of your operations and the effectiveness of your strategies and tactics in leading you to meet your program goals. Continuous improvement may involve making small adjustments in your internal processes. It may also mean refining your original [program design](#)  and revisiting aspects of your [implementation plan](#) , as well as adapting the program to new [needs and opportunities in the market](#) . Although this ongoing assessment and improvement is related to formal [process evaluation](#) , it is distinct in that it is ongoing, less formal, and generally done as part of ongoing internal program management.

To effectively assess and improve your program, you need to build in systems and processes to collect information, review it, and make decisions about program refinements. A common and useful structure for describing this process of continuous improvement is the Plan-Do-Check-Act Cycle shown below.

Plan-Do-Check-Act Cycle of Continuous Improvement



Source: U.S. Department of Energy, 2014

The steps are:

- **Plan.** For your initial program launch and ongoing operation, develop your [implementation plan](#) . Over time, update or implement plans for refining your program, following decisions to make changes.
- **Do.** Launch, then [implement your program](#)  on an ongoing basis.
- **Check.** Assess how your program is working, including any new approaches you have implemented. Through a conscious effort of

Program Design & Customer Experience

Stages:

[Overview](#) 

1. [Assess the Market](#) 
2. [Set Goals & Objectives](#) 
3. [Identify Partners](#) 
4. [Make Design Decisions](#) 
5. [Develop Implementation Plans](#) 
6. [Develop Evaluation Plans](#) 
7. [Develop Resources](#) 
8. [Deliver Program](#) 
9. **[Assess & Improve Processes](#)** 
10. [Communicate Impacts](#) 

Use Case Example – Energy Data Facts (Evaluation & Data Collection)

Energy Data Facts

Energy Data Facts

Following are data points and sources that programs and their partners frequently request from the U.S. Department of Energy when planning, evaluating, or marketing their programs.

National Residential Energy Facts

[Expand All](#)

▶ 1. What percentage of total U.S. energy consumption is made up of consumption from the residential sector?

▶ 2. What does the average U.S. household spend per year on energy?

▶ 3. What percentage of U.S. household spending on energy is spent on electricity?

▶ 4. What does the average household spend on electricity per year?

▶ 5. What are typical household carbon emissions per year?

▶ 6. I've seen some information recently that shows household energy consumption has increased over the last few decades. Is this trend going to continue?

▶ 7. How many households are there within the United States?

▶ 8. How many new homes were constructed in the last decade?

▶ 9. What is the average age of home heating systems?

▶ 10. How is energy used in a residential building?

Consumer Home Energy Upgrade Facts

[Expand All](#)

▶ 1. What is the level of savings typically identified in a home energy audit? How much does an audit cost?

▶ 2. How much will a homeowner save by installing insulation and reducing air leaks?

▶ 3. How much savings are possible through upgrades to my home heating equipment?

▶ 4. What savings are possible through making my windows more efficient?

▶ 5. Are there simple ways to reduce my heating and cooling bills, that don't involve major upgrades?

[Close All](#)

Looking for more Residential Energy Data?

Explore the following sources:

[Residential Energy Consumption Survey \(RECS\)](#)

Administered by the U.S. Department of Energy's (DOE) Energy Information Administration (EIA) every five years, the RECS is a national survey of residential housing units. Interviewers collect energy characteristics on each housing unit participating in the sample, including usage patterns, household demographics, and household characteristics. The latest RECS is based on data collected in 2009 and includes multiple state profiles.

[EIA Annual Energy Outlook 2014](#)

Projections in the *Annual Energy Outlook 2014* reference case focus on the factors that will shape U.S. energy markets through 2040, under the assumption that current laws and regulations remain generally unchanged throughout the projection period. The early release provides a basis for examining and discussing energy market trends.

[Buildings Energy Databook](#)

The 2011 Buildings Energy Databook includes statistics on residential and commercial building energy consumption. Tables contain data related to construction, building technologies, energy consumption, and building characteristics. The Building Technologies Office within DOE's Office of

Use Case Example – Community-Based Outreach (Marketing & Outreach)

Community Based Outreach

Marketing & Outreach – Make Design Decisions

[Where Am I?](#)

 [PDF of handbook](#)

 [Print handbook](#)

Description

Step-by-Step

Tips for Success

Examples

Toolbox

Topical Resources

Tips for Success

In recent years, hundreds of communities have been working to promote home energy upgrades. The Better Buildings Neighborhood Program, Home Performance with ENERGY STAR, utility programs, and other programs present the top lessons these programs want to share related to this handbook. Tips for success are:

- ▶ Adapt messages to your primary target audience's needs
- ▶ **Partner with organizations or individuals that customers already trust**
- ▶ Foster "word of mouth" communication from early adopters
- ▶ Language matters – use words that resonate with your target audience
- ▶ Motivate action through financial incentives and time-limited offers

- Tips in each handbook are related to that stage of the program component.

▶ Partner with organizations or individuals that customers already trust

Many programs found it useful to partner with a range of trusted organizations or individuals to enhance their program offerings to their constituencies or followers. Better Buildings Neighborhood Program enhanced their marketing and outreach efforts by partnering with trusted local groups:

- Community groups and nonprofit organizations
- Large employers, such as local universities
- Respected members of the community (e.g., local elected officials, company executives, opinion leaders)
- Utilities or fuel dealers.

Using partners' existing communications channels proved helpful for many programs. Marketing and outreach materials could be more effective when a potential customer is reached through an organization with which they had an existing relationship.

- [Housing agency NeighborWorks of Western Vermont](#) found that residents of Rutland, a rural community, consider [neighbors to be the most trusted messengers](#), rather than the state government, federal government, or utilities. The program enlisted respected local organizations to work phone banks and spread the word about home energy upgrades. This effort helped the program connect with low- and moderate-income homeowners, resulting in nearly 200 home energy upgrades just six months after the program began promoting the community.
- When [Better Buildings Program San Jose](#) in California set out to encourage homeowners to make home energy upgrades, it joined forces with trusted community organizations to do so. The City of San Jose previously worked in these communities with its partner, the Neighborhoods Initiative, and was able to leverage the trust and goodwill generated by that program to increase its access to partners for the home energy upgrade program. The Most Holy Church lent its office space free of charge to Better Buildings Program San Jose, which reduced costs and allowed program staff to host meetings with homeowners to discuss the options and schedule home energy assessments. Additional events were held at a community center in the community. Partnering with highly regarded organizations in the community

Use Case Example – Developing Partnerships with Financial Institutions (Financing)

Identifying and Partnering with Financial Institutions

Financing – Identify Partners

[Where Am I?](#)

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Description Step-by-Step Tips for Success Examples Toolbox Topical Resources

Step-by-Step

Developing strong working relationships with your lending partners will be key to accessing loans for their home energy upgrades. Entering into a formal partnership parallel with [making financing design decisions](#). Regardless of order, it is good to establish relationships with lending partners in the [program design process](#).

To establish relationships with lenders that will offer consumer financing and program financing, consider the following steps:

- ▶ Identify lenders
- ▶ Engage lenders
- ▶ Determine the process for soliciting proposals from prospective lenders
- ▶ Evaluate proposals
- ▶ Negotiate and execute the lending agreement

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Financing – Make Design Decisions

[Where Am I?](#)

 [PDF of handbook](#)

Description Step-by-Step Tips for Success Examples Toolbox Topical Resources

Step-by-Step

Based on the [financing needs](#) you identified for your community and the financing [goals and objectives](#) established for your program, it is now time to design your program's financing activities.

As your program begins to make decisions regarding financing activities, you are likely to encounter many terms you may not be familiar with. Please refer to the [Glossary of Key Financing Terms](#), developed by DOE, for some of these terms.

Terms defined in the Glossary include:

- Charge-off
- Collections
- Credit Enhancements
- Credit Insurance
- Credit Risk
- Credit Score
- Dealer Loans
- Direct Loans
- Debt to Income (DTI) Ratio
- Default
- Delinquency
- Energy Efficient Mortgages
- Incidence and Severity
- Investor
- Loan Loss Reserves
- Loan Origination and Servicing
- Loan Performance
- On-Bill Financing and Repayment
- Operational Risk
- Performance Risk
- Recovery
- Revolving Loan Funds
- Secondary Market
- Secured Loan
- Subordinate Capital
- Underwriting
- Unsecured Loan

The following are four key steps to consider as you make design decisions:

- ▶ Define the financing problem or opportunity that you intend to address
- ▶ Decide on your program's financing activities

- Stage handbooks do not need to be read in chronological order.

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Use Case Example – Quality Assurance (Contractor Engagement & Workforce Development)

Quality Assurance - Search the Solution Center

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quality assurance

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[NYSERDA Quality Assurance Procedures](#) (310 KB)

Author: New York State Energy Research and Development Authority

Publication Date: 2012

This section of NYSERDA's Home Performance Contractor Resource Guide describes quality control procedures for initial review, field inspection, and administrative review of projects. Supporting worksheets are available to assist with compliance and verification.

[Data Driven Quality Assurance & Quality Control](#)

Author: Patrick Roche; Conservation Services Group

Publication Date: 2012

Presentation describing how Conservation Services Group uses data to monitor market transformation and for internal QA/QC purposes.

[Job Quality, Equitable Access and Quality Assurance Standards in Leading Residential Weatherization Programs](#)

Author: Community Benefits Law Center

Publication Date: 2010

Summary of the standards that support job quality, equitable access and quality assurance in several residential energy efficiency programs from different parts of the country.

[Improving Quality Through Performance Metrics](#)

Author: U.S. Department of Energy

Publication Date: 2012

This video explains how Better Buildings for Michigan's performance metrics and quality assurance enabled them to encourage high-performing contractors, to help underperforming contractors improve, and ultimately to dismiss some contractors.

[Quality Assurance Best Practices: Home Energy Performance with ENERGY STAR Programs](#)

Author: U.S. Department of Energy

Publication Date: 2011

This publication lists best practices for how to create a quality assurance plan and

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- [Community Power Works \(1\)](#)

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Quality Assurance - Filter for Handbooks

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[Contractor Engagement & Workforce Development – Develop Implementation Plans](#)

Develop contractor engagement, quality assurance, and workforce development plans that include strategies, workflow, timelines, and staff and partner roles and responsibilities.

[Contractor Engagement & Workforce Development – Overview](#)

Support and partner with the workforce who will deliver your program's energy efficiency services by understanding their capacity, recruiting contractor partners, enabling technical training and business development support, fostering clear communication, and refining program processes over time, in partnership with your workforce.

[Contractor Engagement & Workforce Development – Make Design Decisions](#)

Solidify your program strategy and decide which customers you will focus on; what products, services, and support you will provide; and how you will partner with contractors and others to deliver services to your customers.

[Evaluation & Data Collection – Overview](#)

Develop evidence-based insights into your program's performance through third-party process and impact evaluations. Learn how to develop effective data collection strategies and timely evaluations to identify important program achievements as well as opportunities for making program improvements.

[Program Design & Customer Experience – Make Design Decisions](#)

Solidify your program strategy and decide which customers you will focus on; what products, services, and support you will provide; and how you will partner with

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Defining a Quality Assurance Plan

Contractor Engagement & Workforce Development – Develop Implementation Plans

[Where Am I?](#)

[PDF of handbook](#) [Print handbook](#)

Description Step-by-Step Tips for Success Examples Toolbox Topical Resources

Step-by-Step

Building on your work thus far, craft an implementation plan for contractor engagement and workforce development that will help contractors effectively deliver your program's services and support the development of the local workforce.

Coordinate across program staff to ensure that activities in other program areas, such as [marketing](#), [financing](#), and [data collection](#) will be featured in or aligned with contractor engagement activities within your [full program implementation plan](#). For example, you will want contractor recruitment, enrollment, training, and readiness to deliver customer services that align with major marketing milestones.

[Expand All](#)

- ▶ Plan contractor recruitment and enrollment activities
- ▶ Plan for program process and business support for contractors
- ▶ Outline contractor training, incentives, and financial support
- ▶ Establish contractor participation procedures
- ▼ Define the quality assurance plan for your program

The quality of services that your program, contractors, and other partners deliver is fundamental to the integrity and success of your program. A well designed and executed quality assurance plan will help ensure that you meet your quality work standards and provide good customer service. Your quality plan will consider both quality control and quality assurance:

- **Quality control (QC)** consists of observation techniques and activities involved in inspecting, testing, or checking an installation to verify that it meets applicable standards, and then fixing the installation if something is not correct.
- **Quality assurance (QA)** is the set of planned and systematic actions intended to ensure compliance with applicable standards in a systematic, reliable fashion. Quality assurance includes the entire process by which work gets done and includes a focus on preventing defects rather than simply finding them.

Think of QC as part of a larger QA process that also includes elements such as standards, training to deliver work to those standards, and processes that help verify work is correct as you do it – not just at the end of the upgrade process. The foundation of your QA process are the [quality standards](#) you established for your program, but the QA process also includes training, reviews and inspections, feedback, and other procedures to reinforce and promote high-quality work and customer service.

Quality Assurance Tips for Success

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[Establish a clear system and process for ensuring quality work](#)

[Provide materials and training to ensure data quality, consistency, and accuracy](#)

[Recognize and reward good contractor performance](#)

[Have clear rules and systems for identifying and remedying contractor problems](#)

[Provide customers with a single point of contact to help them through the upgrade process](#)

[Engage with potential lending partners early and specific business case for their involvement](#)

[Design your financing activities to enable long-te](#)

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[Financing \(2\)](#)

[Contractor Engagement & Workforce](#)

[Development \(3\)](#)

Have clear rules and systems for identifying and remedying contractor problems

Even with the best contractor partners, a program may sometimes encounter difficulties that require remediation. Many Better Buildings Neighborhood Program partners discovered that they could address these difficulties by establishing contractor requirements to set standards for quality work, a transparent remediation process, and measures for dismissing underperforming contractors. They found that the key is to make contractor requirements clear from the beginning of your program. Contractor participation agreements and codes of conduct for interactions with customers can help ensure understanding of standards and provide a rule of thumb for when issues needed to be addressed. Not all contractors are equally skilled or customer-service oriented. These programs learned that, in order to preserve their reputation, they needed to be able to confidently recommend any contractor on their list. It is important to apply corrective actions as needed in response to problems and deficiencies, as well as a procedure to respond to serious or recurring problems such as probation or dismissal from the program. By setting the bar high and dismissing contractors that failed to meet program requirements, these programs helped ensure consistent, quality customer service.

- [Efficiency Maine](#) developed a [Contractor Code of Conduct](#) that contractors sign, stating that they will respect the homeowner's property, minimize disruption to the homeowner, and leave the home in as good or better condition as it was found. It lists 15 things that contractors will and will not do relating to communications, onsite behavior, and work practices. To assure quality in the program, a minimum of 15% of upgrade projects are subject to random and/or targeted onsite inspections, covering the pre-installation, installation, and post-installation phases. [Efficiency Maine's Program Manual](#) outlines clear procedures that program staff will follow in the event that the inspections reveal errors, omissions, or inconsistencies. The manual also outlines procedures for removing a contractor from the program.

Quality Assurance Program Materials

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[NYSERDA Quality Assurance Procedures](#) (310 KB)

Author: New York State Energy Research and Development Authority

Publication Date: 2012

This section of NYSERDA's Home Performance Contractor Resource Guide describes quality control procedures for initial review, field inspection, and administrative review of projects. Supporting worksheets are available to assist with compliance and verification.

[NYSERDA's Home Performance with ENERGY STAR Process Flow Charts](#) (KB)

Author: New York State Energy Research and Development Authority

Publication Date: 2010

Two visual flow charts, one that illustrates the process starting with customer interest to final incentive payment, and another that illustrates the program's quality assurance process.

[New Jersey's Clean Energy Program: Making it Work for Contractors & Programs](#) (1 MB)

Author: New Jersey Clean Energy

Publication Date: 2014

This presentation provides an overview of New Jersey Clean Energy's approach to contractor engagement, including contractor participation requirements, procedure for quality assurance and quality control, production incentives, training procedure, and an online contractor portal.

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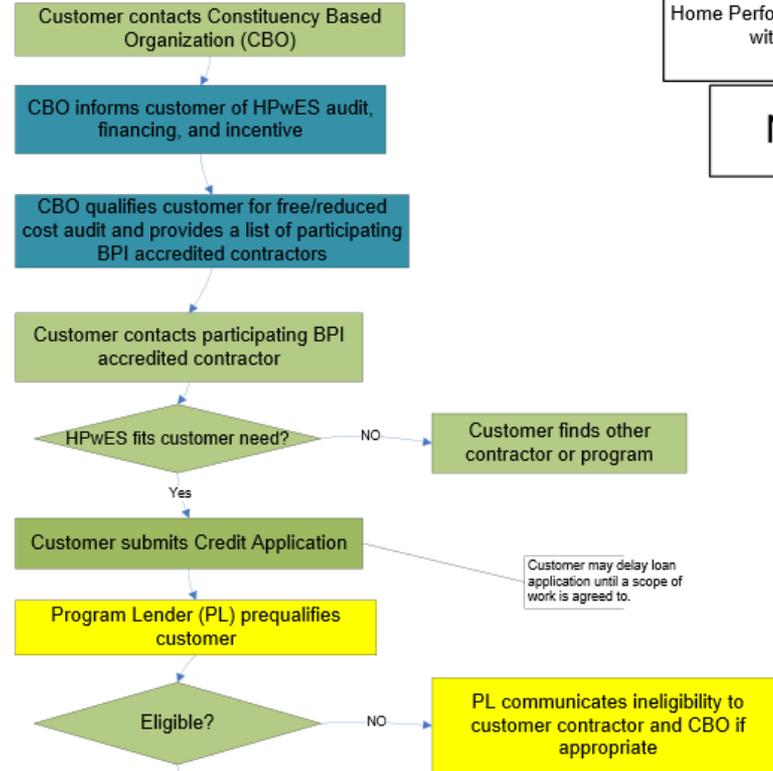
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Process Flow for Home Performance with ENERGY STAR with GJGNY Financing

NYSERDA



Access the Solution Center: <http://energy.gov/rpsc>

The image shows a screenshot of the Better Buildings Residential Program Solution Center website. The page features a navigation menu on the left with links for 'About', 'Handbook Index', 'Energy Data Facts', 'Glossary', and 'HOW TO USE IT: Program Components, Program Design Phases, Content Types'. The main content area is titled 'Access Program Component Handbooks' and displays a grid of icons for 'Market Position & Business Model', 'Program Design & Customer Experience', 'Evaluation & Data Collection', 'Marketing & Outreach', 'Financing', and 'Contractor Engagement & Workforce Development'. Below this is a section for 'Explore Program Design Phase Resources'. On the right, there is a section for 'RELATED RESOURCES' and 'ACKNOWLEDGEMENTS'. Overlaid on the right side of the screenshot is a four-step process flow diagram with icons and labels: 1. Strategy Development (target icon), 2. Planning (worker icon), 3. Implementation (checklist icon), and 4. Evaluation (magnifying glass icon).

Strategy Development

Planning

Implementation

Evaluation

Better Buildings
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Thank you

Danielle Sass Byrnett

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For more program resources:

energy.gov/eere/better-buildings-residential

Energy Efficiency & Conservation Loan Program Webinars

Presentations & recordings are available in the Better Buildings Residential Program Solution Center:

1. [Nov 20: Overview & Cost Effectiveness](#)
2. [Dec 4: Evaluation, Monitoring & Verification](#)
3. [Dec 11: Residential Energy Efficiency Deep Dive, Part 1](#)
4. Dec 18: Residential Energy Efficiency Deep Dive, Part 2
5. Jan 8: On Bill Financing

Questions?

Email us at SE@ee.doe.gov

Webinar recordings are posted on the Better Buildings Residential Program Solution Center www.energy.gov/rpsc

Thank you!

Join us for the rest of the webinar series

▶ **On-Bill Financing** – Thursday, Jan 8th 3:00pmET

Hear from the first two EECLP applicants:

- **Curtis Wynn, Roanoke Electric, CEO**
- **Sherry Jackson, North Arkansas Electric Cooperative, Member Service Coordinator**

Register now! <https://www1.gotomeeting.com/register/230715008>

▶ **Solar Program Overview** – Thursday, Jan 22nd 3:00pmET

EECLP can help enable rooftop solar systems in the service territory of eligible borrowers. Register here: <https://www1.gotomeeting.com/register/493276257>