



**Better Buildings Residential Network
Peer Exchange Call Series:
*Doing More with Less: Low-Cost Program
Strategies***

August 10, 2017

Call Slides and Discussion Summary

Agenda and Ground Rules

- Agenda Review and Ground Rules
- Opening Polls
- Residential Network Overview and Upcoming Call Schedule
- Featured Speakers
 - **Lee Hayes Byron**, Sustainability Manager, Sarasota County Sustainability
 - **Liz Robinson**, Founder, Energy Coordinating Agency
- Discussion
- Closing Poll and Announcements

Ground Rules:

1. **Sales of services and commercial messages are not appropriate** during Peer Exchange Calls.
2. Calls are a safe place for discussion; **please do not attribute information to individuals** on the call.

Better Buildings Residential Network

Join the Network

Member Benefits:

- Recognition in media and publications
- Speaking opportunities
- Updates on latest trends
- Voluntary member initiatives
- Solution Center guided tours

Commitment:

- Members only need to provide *one number*: their organization's number of residential energy upgrades per year.

Upcoming calls:

- August 17: [Back to School: Engaging Students in Energy Efficiency at Home and in the Classroom](#)
- August 24: [Making the Leap to the Multifamily Market](#)
- September 14: [Keeping Up with the Jones': Key Strategies for Behavior Change](#)

Peer Exchange Call summaries are posted on the Better Buildings website a few weeks after the call:
<https://energy.gov/eere/better-buildings-residential-network/peer-exchange-call-summaries-0>

For more information or to join, for no cost, email
bbresidentialnetwork@ee.doe.gov, or go to energy.gov/eere/bbrn & click Join

Best Practices: Sarasota County Sustainability

Lee Hayes Byron, Sustainability Manager

Doing More With Less: Low Cost Program Strategies in Sarasota County, FL

Lee Hayes Byron

Sarasota County Extension and Sustainability



ENERGYupgrade

Know More. Do More. Save More.

Sarasota County, FL

- Southwest Florida
- One Electric Utility, but limited efficiency programs
- No state funding mechanism or efficiency pressure
- Strong interest in county energy programs, but limited resources.



ENERGYupgrade

Know More. Do More. Save More.



EECBG: Get Energy Smart Retrofit Program

Grant Funded Collaborative Program from
August 6, 2010 → February 10, 2012

Impact:

- \$1.9 million was available to homeowners
- \$8.9 Million direct and indirect economic impact
- 92 jobs created
- >2,200 households received rebates
- \$397,540 estimated savings annually



Incentives Available:

- Free DIY Kits
- Rebates for home energy audits
- Rebates for eligible home energy improvements
- Loan for home energy improvements (Low Income)



Post-EECBG: Education & Kits

Energy Upgrade Workshops: 45 minute workshops available to neighborhood, faith, civic groups around the county.
Step by Step Energy & Water Saving Tips.

→ **Free DIY Energy Saving Kit for All Attendees**

Since Sept. 2012:

- 77 Workshops
- 1,641 households received kits
- \$274,000 in annual energy savings just from kit items





DIY Energy Saving Kit:

- Items valued at over \$30
- Estimated Savings: >\$160/year
- Includes: Smart Power Strip, 2 LED bulbs, 2 faucet aerators, rope caulk, insulating gaskets, DOE Energy Savers Book



Energy Upgrade Workshops

- Workshop Outline:
 - Home energy use
 - No cost and low cost ways to save
 - Investment level considerations
 - Home water use
 - No cost and low cost ways to save
 - Incentives available
- Evaluation surveys:
 - Immediately
 - 3 months after workshop (kit use)



Energy Upgrade Website

[HOME](#) |
 [RESIDENTS](#) |
 [BUSINESS](#) |
 [VISITORS](#) |
 [GOVERNMENT](#) |
 [HOW DO I](#) |
 [SERVICES A-Z](#)

Energy Upgrade



Energy Upgrade

Five Steps to Saving Energy

- Step 1: Increase Your Knowledge
- Step 2: Seal the Leaks
- Step 3: Room by Room DIY
 - DIY: Bathroom
 - DIY: Bedroom
 - DIY: Kitchen
 - DIY: Laundry Room
 - DIY: Home Office
 - DIY: Lighting
 - DIY: Outside and Transportation
- Step 4: Heating/Cooling
- Step 5: Access Incentives

Your Energy Use

- Education and Training
- Family Sustainability Kits
- DIY Audit Kits
- Sources & Citations

Five Steps to Energy Savings

The less energy you use...the more money you save. But that's just the beginning. Enjoy other important benefits by improving your home's energy efficiency including:

- Increase your home's comfort year-round
- Add to your home's value
- Protect Sarasota County's environment
- Lead the County to a more sustainable future





Use the information here to help you save money. You can download the Energy Saving Checklists and make a customized list of the tips most relevant for your home.

Choose which improvements you will implement, estimate the possible savings and then mark them off as you complete the improvements.

There are four checklists that vary based on the cost of the improvements.

- No Cost
- Low Cost (<\$75)
- Moderate (\$75 to \$600)
- Investment (>\$600)

Energy Saving Checklists

-  Investment Checklist
-  Low Cost Checklist
-  Moderate Cost Checklist
-  No Cost Checklist

This program receives funding from the US Department of Energy's Energy Efficiency and Conservation Block Grant (EECBG) program.

Family Sustainability Kits

Visit [Family Sustainability Kits](#), for more information about getting your kits.



Energy Upgrade Walking Tour



Energy Outreach in Schools and Libraries

Libraries:

Family Sustainability Kits: (Thanks WPB!)

- Children ages 4-10.
- Return: Books, CD & Go Green flash cards
- Keep: Do It Yourself energy and water saving kit



DIY Audit Kits: (Thanks JEA!)

- Detailed evaluation of home energy & water use
- Includes: Infrared Thermometer, Hygro Thermometer, Kill A Watt Meters (3), Ruler, Tape Measure, Calculator, Shower Timer, books and more
- Keep: Do It Yourself energy and water saving kit



Energy Outreach in Schools and Libraries

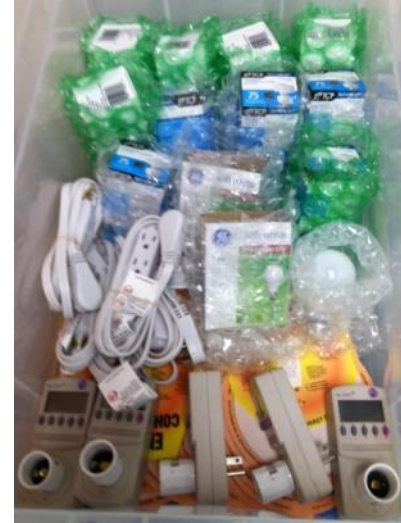
Schools:

Energy Education Kits: (Thanks WPB!)

- Each Middle School has kit on site
- Includes all materials and teachers guide for a hands-on lab experience to test efficiency of 3 types of light bulbs
- Calculate lifecycle costs and ROI

Solar Education Kit: (in development)

- Will be made available to schools on loan
- Purchased from [Florida Solar Energy Center](#)



Energy Outreach in the Community

Community Events:

- Tabling with education materials regularly
- LED bulb distribution if they take an energy pledge

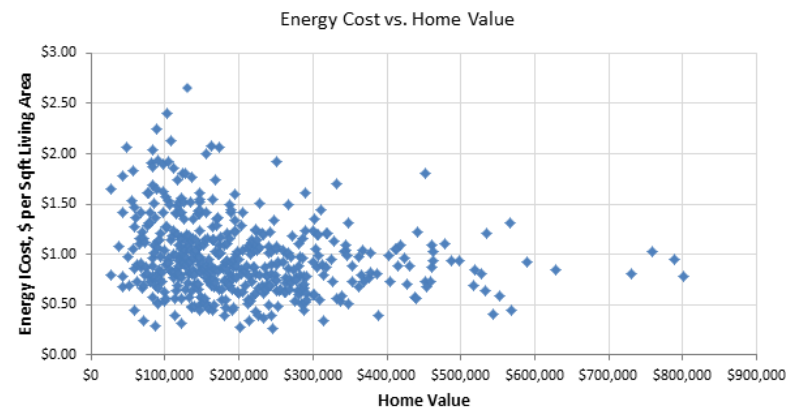


Energy Outreach: Challenges

- Budget reductions: Affect number of households that we can reach
- Limited Staff time: Multiple priorities
- Workshop logistics: Scheduling takes a lot of time
- New audiences:
 - Difficult to get the word out
 - Are we reaching those who need it most?
- Metrics:
 - Surveys, but no actual usage data
- Kits: Better than education alone, but not directly installed & lower impact

Energy Outreach: Future

- Focus on low income households
- Partnerships with non-profits serving homeless and low income families:
 - Incorporate workshops into financial sustainability programs
 - Reach out to low income housing providers to host workshops and consider efficiency upgrades
 - Referrals of LIHEAP recipients
- Applying for grant funds to provide efficiency devices & in-home retrofits



Questions and Discussion

Contact:

**Lee Hayes Byron, Sustainability Manager
Sarasota County**

Thank you!



ENERGYupgrade

Know More. Do More. Save More.

Presentation highlights: Sarasota County (1 of 2)

- **Education efforts coupled with do-it-yourself (DIY) approaches can pave the way for higher investments in residential energy upgrades.**
 - Sarasota's low-cost program relies on awareness initiatives and ready-to-install kits that can bring "quick wins" in terms of energy savings, and have the potential to increase homeowners' interest in more significant upgrades.
- **Partnering with local institutions can help reach a wider and more diverse audience.**
 - Sarasota's workshops have higher attendance when planned in collaboration with local organizations and existing meetings with an established audience.
 - By partnering with libraries and schools, Sarasota reaches families through family-oriented energy saving kits. Teachers are provided an energy efficiency guide they can use in the classroom. However, Sarasota County has found outreach is most effective when a representative can visit the classroom for a presentation.
- **Outreach community events are a great conversation starter.**
 - In their community outreach events, Sarasota encourages people to take an energy pledge as a stepping stone to further promotion of energy efficiency.
- **Staff is limited in a low-cost program and working with volunteers may yield mixed results (e.g. volunteers may not always be available or equipped to provide the best outreach).**

Presentation highlights: Sarasota County (2 of 2)

- **Focusing resources on households that might need them the most could bring greater energy savings.**
 - Sarasota is seeking grant funding to target low-income households that have a greater potential for energy reduction. The program will direct energy efficiency education through financial sustainability programs for people just coming out of homelessness.
 - Moving forward, Sarasota will focus on reaching additional low-income households, including through an energy ambassador training program.
- **Partnerships create a larger network through which programs can scale.**
 - Pending funding awards, Sarasota plans to partner with non-profit and for-profit affordable housing providers to reach multifamily households and a broader audience.
- **Evaluation is important, though challenging, in a low-cost program.**
 - Sarasota uses before and after workshop surveys and receives ~30%-40% response rate. The surveys track uptake of energy efficient behaviors and use of the kit, and 70%-80% of respondents install the kit items in their homes.
 - Survey results are limited; there's no way to ensure that DIY kits are installed properly.

Best Practices: Energy Coordinating Agency

Liz Robinson, Founder

Training for a Greener Tomorrow

Better Buildings Exchange

Liz Robinson
Energy Coordinating Agency



Knight Training Center

ECA's Building Science Training Center



Knight Training Center

- Home Energy Professional
 - Inspector, Auditor, Crew Chief and Installer
- Building Performance Institute
 - Building Analyst, Heating, Air Sealing/Insulation, Envelope, Installer
- DOE & EPA Lead Safety
- OSHA 10, 30 & 40
- EPA Repair and Retrofit
- Weatherization and Retrofit
- Solar Energy Installer
- Remedial math and literacy

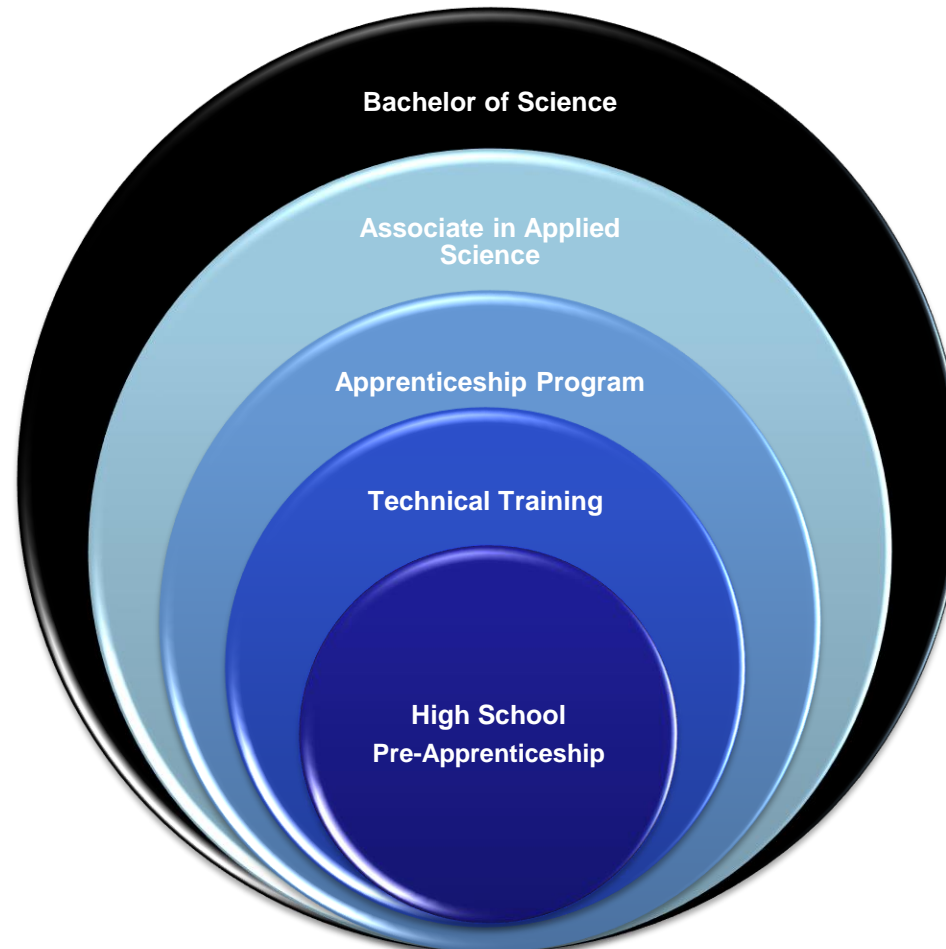


Knight Training Center

Pipeline of Technical Training

Career Ladder

ECA has developed a Pipeline to take students from High School to a Bachelor of Science. There is room to advance on the Energy Efficiency and Solar Career ladder.



www.ecasavesenergy.org



Knight Training Center

Community College of Philadelphia Partnership

Provides:

- Academic Curriculum
 - Remedial math & literacy
 - Associates Degree
- Accreditation
 1. Weatherization Installer & Technician
 2. Building Analyst
 3. **Associate of Applied Science Degree in Building Science**



Knight Training Center

Apprenticeship Program

- ECA is an approved Community College of Philadelphia Neighborhood Site.
- Students take both Building Science courses for college credit at ECA and do technical training during Apprenticeship
- Students can earn their Building Science Associates Degree from CCP upon completion
- Federally recognized Apprenticeship Program



Knight Training Center

School District of Philadelphia Partnership

Programs offered for Philadelphia High School students:

- Summer Enrichment
- Pre-Apprenticeship

Participating Schools: Edison, Strawberry Mansion, Audenreid, Mastbaum



Knight Training Center

Partnerships are Key!

- Local contractors , and builders
- Manufacturers
- Colleges and Universities
- School Districts
- PA Department of Community and Economic Development
- U. S. Departments of Energy and Labor
- U. S. Environmental Protection Agency
- Community Based Organizations and Nonprofits
- PA Department of Labor and Industry



Knight Training Center

Contractor Training



Contractor Information Sessions and Roundtables

Knight Training Center

Instructional Labs



Knight Training Center

Liz Robinson

Energy Coordinating Agency

www.ecasavesenergy.org

www.ecasavesenergy.org



Presentation Highlights: Energy Coordinating Agency (ECA) (1 of 2)

- **Partners are collaborators, not competitors.**
- **Successful partnerships are based around complementary skills and assets, which is essential in keeping costs down.**
 - By positioning itself as the subject matter expert, ECA found that besides online classes, providing experiential training (e.g. lab, field work) in building science is a useful complement for colleges that might not have the capacity to offer students hands-on expertise in this field.
- **Market needs will also drive cost-effective partnerships.**
 - The 2009 American Recovery and Reinvestment Act brought an increased interest in energy efficiency and a higher need for a qualified workforce. ECA recognized this skills gap and saw an opportunity and need to develop trainings through partnerships.
- **Trusted, local and personal connections can help nurture partnerships even with parties that might be hard to win.**
 - Colleges are oftentimes very exigent in their partnership selection, but a personal connection allowed ECA to get a foot in the door with one institution, which led to easier partnerships with others.

Presentation Highlights: Energy Coordinating Agency (ECA) (2 of 2)

- **Partnerships with manufacturers helps workforce stay on the cutting edge of innovation even in times of limited resources.**
 - ECA will organize trainings for contractors to introduce them to the latest high-efficiency equipment and materials launched by their industry partners.
- **Adjusting trainings to meet everyone's needs is a key success factor.**
 - Some trainees might not have the necessary academic background for building science (many trainees were “terrified” that they would be expected to know physics), so ECA offers on-ramp training.
- **Tracking performance ensures trainings are constantly improved and remain relevant to the market needs.**
 - ECA measures success based on the trainees' certification pass rate and job placement. The training program also tracks trainees up to six months into their job, as well as the job retention rate.
- **Energy efficiency touches every part of life. Leveraging cross-sector partnerships will ensure a more robust, successful, and cost-effective alignment of efforts.**
 - By emphasizing this full range of inter-connections, programs can identify new partnership opportunities and broaden their reach.

Upcoming Seasonal Messaging Opportunities

Now is the time to start planning energy efficiency messaging!

AUGUST

November 5
End of Daylight Saving Time

November 23
Thanksgiving

Energy Upgrade California
Facebook Post: With [#DaylightSavingTime](#) ending tomorrow, Bear is gearing up for darker days by using off-grid [#energy](#) sources like solar lights to save money!



Make Your Thanksgiving Energy Efficient This Year

The Residential Energy Services Network (RESNET) Poster



Addenda: Attendee Information and Poll Results

Call Attendee Locations



Call Attendees: Network Members

- Building Performance Institute (BPI)
- City of Charlottesville
- City of Columbia
- City of Kansas City
- County of San Luis Obispo
- Efficiency Maine
- Efficiency Vermont
- Energy Efficiency Specialists
- Institute for Market Transformation (IMT)
- International Center for Appropriate and Sustainable Technology (ICAST)
- Metropolitan Energy Center
- National Grid (MA)
- TRC Energy Services
- Vermont Energy Investment Corporation (VEIC)
- Wisconsin Energy Conservation Corporation (WECC)

Call Attendees: Non-Members (1 of 3)

- Americorps
- Bank of Montreal
- Bay City Electric Light & Power (BCELP)
- BRANZ
- City of Asheville
- City of Milwaukee
- City of Orlando
- City of Philadelphia
- CivicSpark
- Clallam County
- Consortium for Energy Efficiency (CEE)
- Delaware Division of Division of Energy & Climate
- Dimension energetique
- Dun & Bradstreet
- E Source
- emPower (Counties of Santa Barbara, Ventura and San Luis Obispo)
- Enbridge Gas Distribution, Inc.
- Energy Coordinating Agency
- Energy Innovation Task Force

Call Attendees: Non-Members (2 of 3)

- Energy Solutions
- Florida Department of Agriculture and Consumer Services
- Franklin Energy
- Freeborn Mower Cooperative Services
- Green Compass Sustainability
- Holland Board of Public Works
- ICF
- Idaho Power Company
- Local Government Commission
- Lockheed Martin
- Metropolitan Government of Nashville and Davidson County
- Mid Michigan Community Action Agency
- Minnesota Pollution Control Agency
- New York State Homes and Community Renewal
- Parker Interests Unlimited LLC

Call Attendees: Non-Members (3 of 3)

- Pennsylvania Public Utility Commission
- Proctor Engineering
- Richmond Region Energy Alliance
- Sarasota County Sustainability
- Seattle City Light
- Snohomish County
- The Island Institute
- Verdis Group
- Washington State University Extension Energy Program
- West Virginia Division of Energy

Opening Poll #1

- Which of the following best describes your organization's experience with low-cost program strategies?
 - Some experience/familiarity – **50%**
 - Limited experience/familiarity – **31%**
 - Very experienced/familiar – **14%**
 - No experience/familiarity – **3%**
 - Not applicable – **2%**

Closing Poll

- After today's call, what will you do?
 - Seek out additional information on one or more of the ideas – **83%**
 - Consider implementing one or more of the ideas discussed – **9%**
 - Make no changes to your current approach – **8%**
 - Other (please explain) – **0%**