Three DIY Efficiency Projects to Tackle This Year
by Abby Berry

A New Year brings new opportunities to save energy—and money. You may think energy efficiency upgrades require a great deal of time and expense, but that’s not always the case.

If you’re interested in making your home more efficient but don’t want to break the bank, there are several DIY projects you can tackle to increase energy savings. Let’s take a look at three inexpensive efficiency upgrades that can help you save energy throughout the year.

Trim Dryer Vent
Level of difficulty: easy. Supplies needed: tin snips, gloves, measuring tape and masking tape. Estimated Cost: about $25 depending on the supplies you already have.

If your dryer vent hose is too long, your dryer is working harder than it has to, using more energy than necessary. The vent hose should be long enough for you to pull the dryer out a couple feet from the wall, but the shape of the hose should form a line—it should not have a lot of slack, with twists and curves. A shorter, unobstructed vent hose increases the efficiency of your dryer, dries clothing faster and reduces lint buildup, which can create potential fire hazards.

Simply measure, mark and trim the hose to the desired length, then reattach the hose to your dryer and exterior vent. If you’re unsure about the hose length, check out YouTube.com for a quick video tutorial.

Seal Air Leaks
Level of difficulty: moderate. Supplies needed: caulk and caulk gun, weather stripping, gloves, putty knife, paper towels. Estimated Cost: $25 to $50 depending on the materials you purchase.

Sealing air leaks in your home can help you save 10% to 20% on heating and cooling bills. Apply caulk around windows, doors, electrical wiring and plumbing to seal in conditioned air. You should also weather strip exterior doors, which can keep out drafts and help you control energy costs. Types of caulking and weather stripping materials vary, but ask your local hardware or home store for assistance if you’re unsure about the supplies you need. For more information, the Department of Energy provides step-by-step instructions for caulking and weather stripping: https://bit.ly/2Kesu6W

Insulate Attic Stairs Opening
Level of difficulty: moderate. Supplies needed (if you build the box yourself): rigid foam board, faced blanket insulation, tape for foam board, measuring tape, utility knife, caulk and caulk gun, plywood. Estimated Cost: $50 to $100.

A properly insulated attic is one of the best ways to optimize energy savings and comfort in your home, but many homeowners don’t consider insulating the attic stairs, or the opening to your attic space. Even a well-insulated attic can leak air through the stair opening, but luckily, there’s an easy fix.

An insulated cover box can seal and insulate the attic stairs opening. You can build your own insulated cover box or purchase a pre-built box or kit from a local home improvement store like Home Depot or Lowe’s for about $60. If you decide to build your own, check out these step-by-step instructions from the Department of Energy: https://bit.ly/36YNCOQ. It should also be noted, if your attic opening is located in a garage that you do not heat and cool, this upgrade will not be as effective.

Saving energy doesn’t have to be hard. With a little time and effort, you can maximize energy savings and increase the comfort of your home. To learn about additional ways to save, contact Paige Finnell, Energy Services at 423-334-7053.

Challenges and Opportunities
Reliability Challenges:
 Volunteer Energy Cooperative (VEC) faced a challenge early in 2019. The Tennessee Valley Authority (TVA) notified VEC that transformers in the TVA East Cleveland Substation were in danger of failing. These particular transformers fed four VEC substations and approximately 25,000 members on old TVA 69kV lines. This is a TVA substation that has ancient infrastructure, including transmission lines that were installed before TVA was established in 1933. In response, VEC began the largest one-year capital project in our history. We are building nine miles of new 161kV transmission lines between the Benton and Ocoee substations. We are converting most of Bradley County to 25kV distribution voltage and modifying the Benton, Ocoee, and South Bradley substations, including the installation of four new power transformers. We are also installing a second power transformer in the Riceville Substation.

In addition to the challenge in Bradley County, we have continued making significant modifications and additions to the Crossville Substation. This includes all new breakers for the 161kV, 69kV, and a new 25kV distribution yard.

Opportunities:
The economy is doing well across the VEC system. VEC connected around 1,500 new homes in 2019. One of our larger commercial customers in Crossville is adding another 400,000 feet to their operation and increasing their energy needs.

VEC is also nearing the completion of the Vision 2020 plan. We completed the installation of a completely new phone system. The next project for the plan is the replacement of breakers at the Harrison Bay Substation and the replacement of the control panels at the Fredonia substation. At the completion of Vision 2020, VEC will be one of the most technologically advanced co-ops in the United States.

The fiber pilot ongoing in Bradley County has connected approximately 170 homes. We are currently installing fiber in the Spring Creek area of McMinn County. A state grant of $1.3 million made this project possible. We are also installing a fiber project in the Birchwood area of Hamilton and Meigs counties. An ARC federal grant of $1 million enabled this expansion. There are two additional grant applications submitted to the State for part of Roane County and the Ten Mile area as well as Cumberland Cove. We should know by March if we will receive funding for those projects.
Your Change Changes Things

The VECustomers Share program funded $29,600 in community service grants in December. Since the inception of the program in October 2001, over $6.8 million in grants has been awarded. The deadline for grant applications is the last working day of each month. For additional information, contact the office of Marketing and Economic Development, at 423-334-7051. Applications are also available online, at www.vec.org.

Organizations receiving grants in December

Fair Park Senior Center $2,450
Byrdstown Senior Center $1,454
First Baptist Church of Spring City - Food Bank $1,350
Monterey High School Senior Trip Class of 2020 $1,250
Ms. Robin Stone’s 3rd Grade Reading Club $1,246
Ooltewah High Band Boosters $1,100
Kiwani Club of Spring City $1,000
Fentress County Food Bank $1,000
Cherokee Area Council Boys Scouts of America $1,000
Homestead Elementary Coordinated School Health Team $1,000
Midway Quarterback Club $1,000
Helping Hands Ministry $1,000
Fentress Hope Foundation $875
Rotary Foundation of Jamestown $875
CCC (Cumberland County Commission Band) $800
Birchwood Senior Neighbors $750
Cleveland Composite Squadron Civil Air Patrol $750
Midway High School Baseball Booster $750
Dual Enrollment Tuition Assistance $750
Gamma Zeta Chapter of Delta Kappa $700
Ocoee Outreach $700
Roane County Robotics - Full Metal Jackets $650
Meigs High School Tennis Booster $600
Stone Elementary Beta Club $500
Spring City Toys for Children $500
HMS Project Graduation 2020 $500
Hilltopper’s Booster Club $500
Veterans Museum of White Co. $500
Midway Youth Cheerleading Organization $500
Monterey Jr. High Cheerleaders $500
Central High School Choir Booster $460
calhoun Volunteer Fire Department $384
Character Counts Community Initiative $356
Accelerated Reader (AR) Program $300
Central High School Ruruban Club $300
Tennessee Christian Preparatory School $250
(TCPS) Women’s Basketball Team $250
McMinn County Youth Football Organization $250
Healing Hooves of Cumberland Plateau $250
BASIC of TN Inc. $200
Meigs County Crush BU Baseball $200
Meigs County 12U Softball $200

Wholesale Power Supply Challenge:

We continue to study our options regarding wholesale power. The current TVA rate structure is very detrimental to Local Power Companies with significant residential load. When VEC assesses long term wholesale supply and what is best for our membership, we evaluate several areas. We researched the current wholesale cost from TVA compared to the market in the Southeast. The research has shown TVA to be the highest cost wholesale power in the Southeast United States. We researched the financial impact on our members from the actual structure of the wholesale rate. We found that TVA’s current rate structure is very detrimental towards VEC’s load mix (significantly residential). Dependability and age of the transmission system infrastructure serving VEC is another point of evaluation. When we look at outages and the age of the TVA transmission system serving the VEC system, we are very concerned. A large portion of this system is approaching seventy years old.

In 2019 we sent RFP’s to power companies in the Southeast including TVA. The proposals show the potential of reducing our wholesale power costs significantly compared to what we currently pay TVA. This year, TVA offered local power companies a 1.7% discount if they would sign a 20-year rolling notice contract. While the majority of the LPC’s in the Tennessee Valley signed the agreement, VEC and six of the largest local power companies in the Valley did not. The long term arrangement offered by TVA was not in our members’ best interest.

VE plans to complete our detailed evaluation process in 2020. This will help us to move forward with the best option for membership now and in the future. VEC has significant decisions to make regarding wholesale power supply in 2020.

Energy Efficiency Tip of the Month

Are you using your fireplace efficiently? Remember to turn down the thermostat when burning a fire, and close the damper when a fire is not burning.

Source: energy.gov

2021 Calendar Contest

Our 2020 Calendar winner is Janis Wilkey’s image of a Train over the Hiwassee. For our 2021 calendar, we are asking for photo submissions from our Co-op members.

To qualify:

• This year we are looking for photos that include animals and must be found within our service area.
• The composition must be horizontal (landscape).
• Digital not printed.
• Submitted by email to jjones@vec.org or by dropping off a flash drive at your local office.
• Have a resolution of 300 dpi or higher and be a minimum of 8mb image. Cropped images often do not have the resolution or size for a quality print.
• Have photographers name and contact information along with the location of the photo.
• Photos must be submitted by March 1, 2021, for the 2021 contest.
• There is a limit of five photos per account.

We will have a team review the photos submitted for the calendars. If your photo is picked for one of the months, you will receive credit on the last page of the calendar. The overall winning photo will be chosen for the cover of the calendar. If your photo wins the cover, you will also receive a $50 bill credit certificate.

Tennessee Valley Authority
Residential & Outdoor Lighting Fuel Cost Adjustment Effective January 1, 2020

1.985¢

For the most current FCA information, visit www.vec.org

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