# Welcome Packet

Working together to provide the resources and tools you need to make smart investments about your home and business energy choices.







# Welcome

We would like to take this opportunity to thank you for choosing to support the North Carolina Sustainable Energy Association (NCSEA) when you joined Coastal Credit Union. Please visit our website at www.energync.org to see what NCSEA can do for you.

#### Signing In

Please sign into our website using the following username and password:

username: The email address that you provided to CCU

password: ncsea2014

For your security, please create a new password following account setup by clicking "Setup my login" in the

right-hand menu.

#### Who We Are

Since 1978, NCSEA has been the leading nonprofit in North Carolina devoted to growing renewable energy and energy efficiency opportunities for all consumers, such as residents and businesses in our state. By working together, we can continue build a sustainable energy future for many generations to come!

#### Benefits of a NCSEA Membership

NCSEA develops broad, fact-based community understanding and support for North Carolina's clean energy economy through consumer education, promoting economic development, and public policy initiatives.

As a member, you have access to resources and tools that serve to:

Engage you in your clean energy community. This includes individuals, businesses, industries, utilities, colleges and universities, and decision-makers.

Enable you to make educated decisions on adopting renewable energy or energy efficiency products and services for your home and business.

Empower North Carolinians with fair policies and financing mechanisms that encourage market development and bring jobs, economic opportunities, and affordable energy to all North Carolinians.

Thank you from Coastal Credit Union and NCSEA!

If you need assistance with your NCSEA member profile,
please contact NCSEA at info@energync.org with the subject line
"Question: CCU/NCSEA member".



# Home Energy Improvement Priorities

#### No Cost with Immediate Payback:

Turn off the lights in rooms that are not in use.

During winter, open curtains on your south-facing windows during the day to allow sunlight to naturally heat your home and close them at night to reduce heat loss.

Don't place lamps or other heat sources near your thermostat.

Don't set your thermostat at a higher/lower temperature than normal in the hope of heating/cooling your house faster: it will not heat or cool your home any faster & could result in unnecessary expense.

Unplug equipment that drains energy when not in use (i.e. computers, cell phone chargers, fans, coffeemakers, desktop printers, radios, etc.).

Keep your fireplace damper closed unless a fire is going. Keeping the damper open is the same as keeping a window open in the winter.

#### Low Cost with Quick Payback:

Caulking and weather stripping will reduce drafts, save energy and make you more comfortable. Seal seams, cracks, and openings to the outside. Start by sealing air leaks in the basement and the attic. These are often the places where the biggest holes can be found and properly sealing them will yield big benefits.

Insulate and weather strip attic door/pull down stairs.

Insulate hot water pipes (especially the first 10+ feet).

Insulate hot water tank (if in unconditioned space and more than 5 years old).

Insulate outlets on exterior walls.

Change from incandescent light bulbs to CFL, or better yet, LED bulbs.

Install timers, photocells, or occupancy sensors to reduce the time lights are on.

Add a plastic window insulation buffer to reduce drafts and help your home hold heat.

Maintain your HVAC properly with annual maintenance and tune-up so it runs efficiently.

Clean or replace filters in your home's furnace, air conditioner, and heat pump regularly.

Install a programmable thermostat that adjusts according to your schedule or adjust your thermostat when you leave home.

#### **Medium Cost - Wise Energy Investments:**

Attic insulation - Once you have sealed air leaks, having proper insulation in your home is one of the most cost-effective ways to use a whole-house approach to reduce energy waste and make the most of your energy dollars.

HVAC system - Maintaining your heating and cooling systems not only provides savings and increased comfort, but also helps ensure your safety. Look for an energy efficient model when replacing your system and be sure it is "right sized" so it functions properly and efficiently. The choice of a heating and cooling system that closely matches the home's load conditions is paramount to ensuring proper performance and comfort.



# Caulking Windows



Caulk on the exterior of the window frame can dry and crack from aging and temperature change. If you find the caulk is coming off or contains cracks, you need to re-caulk.

#### Material

Caulk comes in cartridges that fit in a caulk gun; however, some pressurized containers do not require a caulk gun. They also come in aerosol cans and squeeze tubes.

#### **Advantages**

- Saves money on your heating and air conditioning bill by preventing air leaks.
- Prevents uncomfortable drafts in your home.

#### Tools required:

Caulk gun (if not using a pressurized container, putty knife or similar tool to scrape the old caulk)

#### Materials required:

Caulk

#### Estimated time taken:

For 8-10 windows: 2-3 hours to prepare and apply the caulk, 12-15 hours for it to dry

#### **Project cost:**

Prices vary depending on type of caulk, starting from \$5 per tube

#### Installation

There are caulks made specifically for concrete, brick, wood, and even for glass and metal. It is best to ask someone at the hardware store for advice on the best caulk to use for your specific type of window. Typically, Polyurethane caulk is the most versatile and sticks to just about everything. Additionally, Polyurethane caulk is quite flexible and lasts longer than most types of caulk. One tube should be enough for a whole window.

#### How To

- Remove any old caulk using caulk softener. Apply caulk softener at least 2 hours in advance, and then remove old caulk with a putty knife. Try to strip off or scrape out old caulk and smooth out the surface.
- Wipe down the surface with a damp cloth to remove any residue or dirt. Be careful not to wash old windows with water since water entering through the crack might damage the window. Make sure the window surface is clean and dry before beginning to caulk.
- Cut the tip off of the tube of caulk at a 45-degree angle and load it into a caulking gun.
- Break the seal on the tube by inserting a nail or a small screwdriver into the nozzle opening.
- Squeeze and apply the caulk along the seam of the window at an angle, moving the gun slowly and evenly. When filling larger gaps, move more slowly to let the caulk adequately fill the space.
- For a finishing touch, use a wet finger to smooth out the caulk and give it a clean look, as soon as caulk is applied to prevent caulk from drying and cracking.
- Allow 12-15 hours for caulk to dry and set.

#### Additional Recommendations

Caulking is best done when the outside temperature is above 45°F and humidity is low. Higher temperatures help the caulk to dry and set properly.

Source: www.energysavers.gov



## Why Air Leaks Cost You Money



Do you feel drafts in your home? Are your heating and cooling bills higher than they should be? Do you experience uneven temperatures between rooms?

#### If you answered yes to any of these questions, you likely have air leaks!

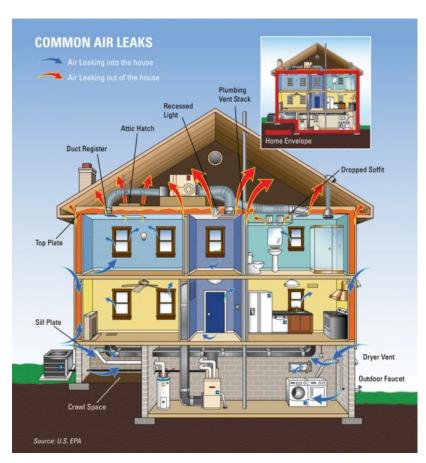
Often times, air leakage occurs in areas of your home you may not notice. The most significant air leaks are hidden in the attic and basement. In cold weather, warm air rises in your house, just like a chimney. This conditioned air is wasted as it escapes through leaks around windows, doors, and cracks in your basement.

These leaks not only allow air to infiltrate your home, but they allow other unwanted disturbances such as dust, moisture, bugs, and rodents.

Addressing air leaks in your home may result in lower heating and cooling bills and an overall more comfortable household.

#### **Priorities:**

- Attic
- Foundation areas (i.e. basement and crawlspace)
- Living spaces The living space is the "conditioned" space





### Choosing a Clean Energy Service Provider

#### **Best practices**

Choosing a good contractor to install home energy improvements can be as important as the equipment you choose, because proper installation and maintenance is needed for the equipment to operate safely, reliably, and at maximum efficiency.

#### Suggestions for selecting a contractor:

#### Ask for references and testimonials.

If you already know a reputable heating and air conditioning contractor, that is a good place to start. If you don't, friends and relatives in the area can often give you recommendations.

#### Ask for accreditations.

For instance, most leading residential contractors belong to the Air Conditioning Contractors of America (ACCA) or the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA). Both sites provide listings of heating, cooling, ventilation and refrigeration contractors in your area. Look for contractors whose technicians are certified by North American Technician Excellence (NATE) and/or are partnered with ENERGY STAR.

Do not work with a company offering to give you an estimate over the phone without ever looking at the job to be done.

A good company will give you a written bid (or proposal) outlining the equipment to be installed, the work to be done, and the price, including labor costs.

Get estimates from multiple contractors, but try not to let the lowest price be the main reason for selecting a contractor.

Better contractors may charge more, but they may offer greater value. Be skeptical of extremely low bids; those contractors may not be including all routine services and customary warranties, or they may be trying to unload outdated or unreliable equipment.

#### Reliable contractors are professional.

Their people are prompt and courteous. How a company treats you now reflects how they will treat you if there is a problem. They should have an office or shop facility, and they should not be ashamed to have you visit them. An office or shop is an indication that the company has been in business and intends to remain in business.

Source: How to Choose a Contractor, American Council for an Energy-Efficient Economy (2015)

Recommendations for Finding a Contractor, Energystar.gov (2015)





