Campus Climate Action Corps
Florida Energy Efficiency Community Resource Guide

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Campus Compact  Campus Climate Action Corps  AmeriCorps
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About Us

The Campus Climate Action Corps (CCAC) is a [Campus Compact](http://campuscompact.org) and [AmeriCorps](https://www.americorps.gov) initiative dedicated to improving energy efficiency and cost savings for economically disadvantaged individuals and to lessening our environmental impact.

CCAC AmeriCorps members serve as a vital link to spread our message across the entire state! Campus Compact initiatives bring positive growth to both the AmeriCorps members and the communities they serve. The CCAC program is a staple in the community because it promotes energy conservation for environmental and financial reasons while bringing communities closer together.

The goal of CCAC is to reach households that have higher energy burdens or spend a disproportionate amount of their income on energy bills. Especially focused on economically disadvantaged residents, CCAC provides access to energy efficiency resources that aim to lower energy bills and promote environmental sustainability.

Environmental sustainability lies at the heart of every CCAC initiative. More people saving energy means fewer carbon emissions released into the environment, a vital step in the right direction in our battle against the climate crisis. CCAC initiatives build community partnerships to promote energy efficiency awareness. Not only do these partnerships encourage various groups to unite around environmental stewardship, but they also open pathways for future collaboration and opportunity in the community. Collectively, CCAC's initiatives spur environmental and financial progress while uniting communities in the name of energy efficiency.

Additionally, CCAC initiatives have a profound impact on the AmeriCorps members who participate in them. AmeriCorps members gain experience in planning and operating an environmentally focused public awareness campaign while developing valuable skills in the process. Over their term of service, members develop skills such as time management, leadership, communication, creativity, and volunteer management. The skills and experiences that Campus Compact members gain over the course of service are certainly invaluable to any individual seeking to enhance their professional self, regardless of their desired career.

CCAC’s initiative provides an irreplaceable framework for sustainable living that works to preserve the environment, benefits the community, and provides priceless experiences and skill development for people passionate about making a difference.

**CCAC In Florida**

CCAC has a growing presence in Florida and currently is partnered with one host site: Stetson University. We also have 3 CCAC members completing AmeriCorps service at Stetson. To learn more about our other projects, please visit our website [here](http://www.ccac-florida.org).
Why is Energy Efficiency Important?

**Energy efficiency** means using less energy to perform a task (i.e. turning off a light.) Having an energy-efficient home improves your household’s health, safety, and comfort, as well as helps protect the environment. Finding ways to maximize energy efficiency is particularly important for low-income households because economically disadvantaged people experience higher energy burdens. Low-income houses have an average of 5% more of an “energy cost burden” than average households.

**Improves Health, Safety, and Comfort**
Maximizing energy efficiency reduces the need to burn fossil fuels to generate electricity. Pollutants from fossil fuel combustion can lead to cancer, respiratory illnesses, heart disease, and stroke, all of which are leading causes of death in the United States. High energy burdens may also force you to cut back on heating, cooling, and lighting expenses, which can have many physical and mental health consequences, such as uncomfortable temperatures, inadequate lighting, unsafe housing conditions, and constant financial and social stress.

**Helps the Environment**
When you burn fossil fuels to power your home, you release carbon dioxide and other **greenhouse gasses** that trap heat in Earth’s atmosphere, warming the planet’s surface. This leads to **climate change** which causes sea-level rise, inhabitable climates, extreme weather, and many other problems that threaten life on Earth. Economically disadvantaged populations are especially vulnerable to the effects of climate change. Increasing energy efficiency can slow climate change by decreasing demand for energy imports and reducing greenhouse gas emissions. The American Council for an Energy-Efficient Economy estimates that energy efficiency policies could reduce annual carbon dioxide emissions by 1 billion tons by 2030.

**Energy Efficiency in Your Home**
Whether you are a homeowner or a renter, you will find information in this manual about how you can lessen your household energy expenses through:

- The Low-Income Home Energy Assistance Program (LIHEAP)
- The Weatherization Assistance Program (WAP)
- Insulating Window Inserts
- Rebates for energy and cost-efficient upgrades
- Tips for maximizing energy efficiency
- Advocating for Climate Action in Massachusetts

**Saves Money**
Economically disadvantaged households can save money on heating, water, electricity, and household appliances through energy efficiency benefit programs such as LIHEAP (Low-Income Home Energy Assistance Program, pg. 7), WAP (Weatherization Assistance Programs, pg. 9), and
rebate and incentive programs (pg. 10). Simple tips and tricks can help you save even more energy and money in your home (pg. 23).

Florida Energy Profile

Energy Burden in Florida
“Low-income Floridians face high energy burdens, meaning that an outsized portion of their income goes towards home energy bills, including electricity, natural gas, and other heating fuels. This is despite their having some of the lowest energy rates in the United States. While investments in energy efficiency will benefit utilities and communities throughout Florida, low-income and rural residents will see particular benefits since they tend to live in less energy-efficient housing. Research suggests that for both single- and multifamily low-income households, energy efficiency can eliminate up to 35% of their excess energy burden.”

Florida Energy Consumption by End-Use Sector, 2021

Source: Energy Information Administration, State Energy Data System
The Low-Income Home Energy Assistance Program (LIHEAP)

What is LIHEAP?
The Florida Low Income Home Energy Assistance Program (called LIHEAP or HEAP) is a state and federally-funded program that provides money to low-income homeowners and renters to help pay for winter heating bills from November 1st to April 30th. LIHEAP serves millions of people each year.

LIHEAP Eligibility in Florida
The amount of help you receive from LIHEAP is dependent on your income, household size, and energy costs. Typically, people who participate in or have family members who participate in benefit programs such as SNAP, SSI, and TANF are automatically eligible for LIHEAP. Renters can qualify for LIHEAP benefits even if heating is included in their rent. In order to qualify, you must also have an annual household income (before taxes) that is below 60 percent of the State Median Income. To determine if you qualify for LIHEAP, contact your local Community Action Agency (CAA), which can be found here.

LIHEAP Application
Home heating costs during the heating season (November 1, 2023 - April 30, 2024) may be eligible for LIHEAP. The online application opens on October 1, 2023, and can be accessed here. Or, you may call the HEATLINE at 1-800-632-8175 to schedule an appointment to complete the application. If you are a first-time applicant, you'll need to apply in person at the fuel assistance agency in your area. Locate your fuel assistance agency on the Department of Housing and Community Development Resource Locator page.

The Weatherization Assistance Program (WAP)

What is Weatherization?
Kind of like bundling up your home!
Weatherization is the process of protecting a building from air leaks and the elements to increase energy efficiency and reduce heating and cooling costs. According to the US Department of Energy, proper weatherization helps households save up to 15% on heating and cooling costs and 11% on total energy costs annually.
What is the Florida Weatherization Assistance Program?

The Weatherization Assistance Program provides grants to community action agencies, local governments, Indian tribes, and non-profit agencies to fund energy-saving repairs to low-income homes in all counties. Grants are allocated based on a formula combining population and weather data, and an average of $2,600 may be spent on each home. The type of measures include insulation, weather stripping, water heater wraps and reduction of air infiltration. Furnaces and air conditioning systems may be repaired or replaced. An energy audit and diagnostic testing must be performed on each home. The house data is entered into a computer software program, and a printout is provided. The printout is evaluated to determine the measures that, if addressed, should reduce the energy consumption of the home, thus lowering the client’s monthly utility bill.

Weatherization Services that are Typically Funded Include:

- Insulation and venting
- Weather stripping
- Door sweeps
- Air sealing and caulking
- Sealing ducts
- Chimney bypasses
- Wrapping pipes
- Safety-related repairs
- Replacing incandescent bulbs with LED

Lasting Benefits of Weatherization

- Nationally, economically disadvantaged families spend on average $1,800 on energy bills each year. WAP’s energy upgrades save families an average of $437 annually on heating and cooling costs, with additional energy and cost savings from lighting and appliance upgrades.
- Low-income homes typically save an average of 35% on energy after weatherization services.
- Weatherization continues to save money and energy each year.
- Weatherization helps the environment by reducing carbon dioxide (CO2) emissions by 2.65 metric tons/year per home.
- Weatherization decreases pollution from burning fossil fuels and coal, improving local air quality and physical health.

To learn more about the Weatherization Assistance Program, click here.
Additional Florida Energy Rebate Programs

Florida Public Utilities Residential Electric Rebates

Jumpstart your HVAC energy-savings with up to a $100 rebate when you:

- Replace your current system with a high-efficiency heat pump or air conditioning system
- Install a new high-efficiency heat pump or air conditioning system

### Residential Rebate Amounts

<table>
<thead>
<tr>
<th>Appliance Type</th>
<th>Customer Rebate</th>
<th>Dealer Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1 - Heat Pump Replacing Resistance Heat</td>
<td>$100</td>
<td>$75</td>
</tr>
<tr>
<td>Type 2 - Heat Pump Replacement</td>
<td>$100</td>
<td>$25</td>
</tr>
<tr>
<td>Type 3 - Air Conditioner Replacement</td>
<td>$100</td>
<td>$25</td>
</tr>
<tr>
<td>Type 4 - New Heat Pump or Air Conditioner</td>
<td>$100</td>
<td>$25</td>
</tr>
</tbody>
</table>

Click [here](#) for more information on electric rebates in Florida.

To be eligible for a rebate, the residential customer must:

- Replace existing equipment with—or install—a new heat pump (AHRI rating only) or central air conditioning system with a minimum rating of 15.0 SEER
- Be the owner of the residence, which must be located in FPU's electric service area
- Have a ducted HVAC system
- Submit a signed rebate application to FPUC within one year of the installation date
- Dealer incentive will be paid to the contractor for the purchase and installation of a qualifying unit once the residential rebate is approved

**Additional Details:**

- For a new heat pump installation or replacement, the maximum supplemental strip heating physically contained in the system shall not exceed 2 kW per nominal ton. On a system of less than 2.5 tons, a 5 kW heat strip will be allowed
- For a heat pump using supplemental strip heating, a two-stage indoor thermostat is required
- If replacing a straight cooling system, the residence cannot have oil or electric resistance as the primary heat source
The customer and/or contractor must attest that the heat pump or air conditioner installation meets all required codes and standards. FPU accepts no liability for the installation.

Climate Action in the United States

In the 21st century, the world faces an unprecedented crisis: climate change. Due to the burning of fossil fuels and other unsustainable practices, harmful greenhouse gases are released into the air that warm the planet and send a range of cascading effects down our natural ecosystems. Coastal homes will be flooded, extreme weather events will become stronger and more common, and a wide variety of other effects will cause both environmental and socioeconomic effects throughout the United States and the world. The Northeastern United States will not be shielded from these effects, and this brings about the urgent need for climate action.

Climate action is about the process of taking meaningful steps that reduce our greenhouse gas emissions and enacting meaningful change that will prevent the climate crisis from accelerating. Nationally, the Inflation Reduction Act is the flagship bill of the Biden administration that aims to curb greenhouse gas emissions and fight against climate change. Provisions of the bill include investing approximately 300 million into climate provisions, including renewable energy technology, investing in electric vehicle infrastructure, and over 1 billion dollars towards climate resilience in low-income areas. Also, as part of his climate agenda, Biden launched the American Climate Corps to train young people in climate-facing jobs, including renewable energy jobs and jobs that improve the country’s climate resilience efforts. The initiative hopes to put 20,000 young people to work after a paid training program. International efforts are also underway to decarbonize, as demonstrated by the annual COP (Conference of Parties) conventions which aim to foster a sense of collaboration around the issue on a global scale. In 2015, a monumental conference was held in Paris, where nearly every country in the world committed to the Paris Climate Agreement, where greenhouse gas emission reduction targets were set, laying the groundwork for significant climate action. The COP 28 convention was recently held in Dubai, UAE, in December 2023, with many of the world’s leading countries and delegates once again committing to reducing fossil fuel use.

Climate Action in Florida

Florida Climate Action

Florida is considered one of the most vulnerable areas to climate change, with Southeast Florida especially susceptible to impacts such as rising sea levels. Miami-Dade County has been on the forefront of these issues for many years. Our Board of County Commissioners and administrative departments have been implementing policies and initiatives to address climate change, environmental protection, and other important sustainability issues, including energy efficiency and water conservation. By tracking greenhouse gas (GHG) emissions early and analyzing climate change data, we have taken steps to reduce GHG emissions and avoid
or reduce the severity of climate change impacts.

GreenPrint Adaptation Strategies & Initiatives

A great deal of vital research is now underway that will increase our understanding of regional climate change impacts. Not only are temperatures and sea levels affected, but rainfall, storms, and ecological conditions are all impacted. The exact local impacts are extremely difficult to predict, given the complex drivers and dependencies, but general trends can be modeled. For example, El Niño and La Niña effects are common in the southeast, resulting in dramatic seasonal and year-to-year variations in temperature, precipitation, and tropical storm development. In spite of the complexity and uncertainty associated with predicting local climate change impacts, we are able to build cost-effective adaptation strategies from our existing hazard planning efforts. During this first five-year phase of our Climate Change Action Plan (CAP), the majority of adaptation planning efforts outlined below will revolve around gaining a better understanding of the potential future climate changes our region may experience. This better understanding will arm us with critical knowledge necessary to develop planning tools that will help us evaluate potential resulting impacts, which in turn will allow us to better plan and prepare our community.

Strategies

- Track local and regional climate change indicators and trends
- Develop local and regional climate change scenarios depicting various impacts and time frames
- Integrate future climate change impacts into community and government decision-making for capital, operational, and land-use issues.
National Energy Efficiency Resources

American Council for an Energy-Efficiency Economy (ACEEE) – develops transformative policies to reduce energy waste and combat climate change.
Address: 529 14th Street NW, Ste. 600
Washington, DC 20045
Phone: (202)–507–4000
Website: aceee.org

Dashboard of State Incentives for Renewable Energy and Efficiency (DSIRE) – A website dedicated to finding programs that homeowners can benefit from in the realm of energy efficiency.
Website: https://www.dsireusa.org/

Environmental Protection Agency (EPA) – protects human health and the environment.
Website: epa.gov
Contact EPA: epa.gov/home/forms/contact-epa

National Energy Education Development (NEED) – trains and assists teachers in harnessing the energy of the classroom – the energy of students. Teaches students and teachers each year about energy.
Address: 8404 Kao Circle, Manassas, VA 20110
Phone: 1-800–875–5029 or 1–703–257–1117
Email: info@need.org
Website: need.org/educators

US Department of Energy (DOE) – The mission of the Energy Department is to ensure America’s security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions
- Energy Saver Guide
- DIY Projects
- Find incentives and financing
- Office of Energy Efficiency and Renewable Energy

National Housing Trust– Assists with every stage of a home energy project including planning, financing, installation, and management. The National Housing Trust Fund is a federally funded program that assists in the production and preservation of affordable housing with services for extremely low- and very low-income households, including homeless families, who, without the availability of integrated supports, might experience less stable tenancies.
Address: 1101 30th Street, NW Suite 100 A Washington, DC 20007
Phone: 202–333–8931
Email: nht@nhtinc.org
Website: nationalhousingtrust.org
Weatherization Assistance Program (WAP) – provides no-cost energy audits and weatherization services for low-income homes. Find your local WAP agency here.
About: energy.gov/eere/wap/about
How to Apply: energy.gov/eere/wap/how-apply

Florida State Resources

New Smyrna Beach – Energy Efficiency Rebate Program – The Utilities Commission of New Smyrna Beach (UCNSB) is offering rebates to residential and small business customers for the purchase of a variety of energy efficiency improvements. The Utilities Commission offers rebates for solar attic fans, air conditioning, EV chargers, and low-flow toilets, as well as a program for the interconnection of renewable generation systems to the UCNSB electrical system.
Address: 8 Glover Square Marblehead, MA 01945
Email: efisher@ucnsb.org
Phone: (386) 427-1361
Website: www.ucnsb.org/conservation-programs

Florida Public Utilities – Residential HVAC Rebate Program – Florida Public Utilities offers rebates to electric residential customers who improve the efficiency of homes. Central air conditioners and heat pumps that meet program requirements are eligible for up to a $100 rebate from FPU. Units must be 15 SEER or higher in order to be eligible. Contact FPU for more information on this program.
Address: ATTN Rebates
Debary, FL 32713
Phone: (888) 880-0973
Website: fpuc.com/residential-electric/residential-electric-rebates/
Tips for Saving Energy and Money in Your Home Year Round

In the following section, you will find some do-it-yourself tips to maximize energy efficiency and cost savings during both the warm and cold months of the year.

Warm Weather Energy Saving Tips

Fan Yourself
Fans are more energy and cost-efficient than air conditioning (AC). Just remember to turn off the fans when you’re not in the room. They aren’t intended to cool the space—just the people in the space, via the wind chill effect.

Optimize Your Thermostat
If you opt for air conditioning (AC), the US Department of Energy recommends setting your thermostat to 78°F in the summer to save up to 10% in energy costs each year. For every degree you raise your thermostat above 72 degrees, you can save up to 3% of your cooling expenses. Also, consider setting your thermostat to a higher, less energy-intensive temperature while you’re not home. Make sure you get routine maintenance checks of your AC; 50% of system failures associated with AC units are due to a lack of maintenance.

Monitor Water Usage
In the summer, water usage increases—whether it’s watering your lawn or taking more showers. You can keep usage down and save money by:

- Getting a rain barrel to collect water for your garden or lawn.
- Watering grass and plants in the early morning or at dusk, so the water doesn’t evaporate in the summer heat.
- Installing “low-flow” water fixtures, such as shower heads, toilets, and outdoor sprinklers.
- Taking cool showers and washing dishes with cold water.

Close the Blinds & Check Seals
Using a fan isn’t the only way to keep your home cooler in the hot summer months. Take a quick walk around the house and close all the blinds and curtains during the day. This will keep your rooms from heating up and make spaces easier to cool with an air conditioner or fan. At night you can open the windows to let in the cooler night air. You can also add weather stripping to your doors and windows to better insulate your home.

Tips to Follow Rain or Shine All Year Round!

Swap Out Old Light Bulbs With LEDs
Not only are LED bulbs 83% more energy efficient than traditional incandescent bulbs, but they also cost $1.19 annually compared to the $7.01 annual cost of incandescent bulbs. LED lights also contain less toxic chemicals like mercury.

Wash Your Clothes with Cold Water and Minimize Loads
Washing your clothes with cold water could save you up to $200 annually! Also, try to air dry your clothes instead of using a dryer and do BIG loads of laundry. Doing one load of laundry has the same carbon footprint as leaving an LED light on for 13 days straight.
**Eliminate Phantom Loads/Energy Vampires**

Energy vampires or Phantom Loads are appliances or plugged-in devices that draw energy even when not in use, usually by being in “standby” mode. Vampire energy can account for up to 10% of your monthly energy bill! The best way to avoid vampire energy is to plug energy vampires into power strips that can be turned off when not in use. Common appliances that are energy vampires include:

- Phone chargers
- Desktop computers
- Stereos and TVs
- Coffee makers
- Microwaves
- Video game consoles
- Satellite & cable boxes

- Printers

**Turn off the Lights**

Turn off the lights and other electronics when not in use -- it’s such a simple way to help the planet!

**Follow the “Three R’s” – Reduce, Reuse, Recycle**

When following the “Three R’s,” reducing your consumption of energy, for example, is the best option. If you are unable to reduce the action you are participating in, the next best options are to reuse, then recycle. You can also implement these guidelines in many other daily habits, such as reducing food waste by composting, reusing water bottles, and recycling appropriate materials from your residence.
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>The Climate Crisis</strong></td>
<td>The urgent and escalating global environmental challenge characterized by significant and adverse changes in climate patterns. It is primarily driven by human activities, such as the burning of fossil fuels, deforestation, and industrial processes, leading to increased concentrations of greenhouse gasses in the atmosphere and resulting in long-term changes in temperature, weather patterns, and sea levels.</td>
</tr>
<tr>
<td><strong>Energy Burden</strong></td>
<td>Energy Burden is the proportion of a household’s income that is spent on energy-related expenses, including electricity, heating, and cooling. A high energy burden indicates that a significant portion of a household’s income is allocated to meeting energy needs, potentially leading to financial strain.</td>
</tr>
<tr>
<td><strong>Energy Efficiency</strong></td>
<td>Energy Efficiency refers to the use of less energy to provide the same level of performance or output. It involves adopting technologies, practices, and systems that minimize energy waste and enhance the overall effectiveness of energy use, contributing to reduced energy consumption and environmental impact.</td>
</tr>
<tr>
<td><strong>Greenhouse Gasses</strong></td>
<td>Greenhouse Gasses are atmospheric gasses that trap heat, leading to the greenhouse effect and the warming of the Earth’s surface. Common greenhouse gasses include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and fluorinated gasses. Human activities, such as burning fossil fuels and deforestation, significantly contribute to the increased concentrations of these gasses, contributing to climate change.</td>
</tr>
<tr>
<td><strong>Inflation Reduction Act</strong></td>
<td>The Inflation Reduction Act is a legislative measure designed to address and mitigate the impacts of inflation on the economy. It may include policies and strategies aimed at controlling inflation, stabilizing prices, and promoting economic growth while minimizing adverse effects on consumers and businesses.</td>
</tr>
<tr>
<td><strong>Phantom Loads</strong></td>
<td>Phantom loads refer to the energy consumed by devices when they are off or in standby mode.</td>
</tr>
<tr>
<td><strong>Rebate</strong></td>
<td>A Rebate is a partial refund or discount on a product or service. In the context of energy, rebates are often provided by governments or utility companies to incentivize individuals or businesses to adopt energy-efficient technologies or practices. These financial incentives help offset the initial costs of implementing energy-efficient measures.</td>
</tr>
<tr>
<td><strong>Weatherization</strong></td>
<td>Weatherization involves making structural and operational improvements to a building or home to enhance its resistance to the impacts of weather conditions. This may include insulation, sealing gaps and cracks, upgrading</td>
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</tbody>
</table>
windows and doors, and other measures aimed at improving energy efficiency and reducing energy consumption for heating and cooling. Weatherization initiatives contribute to both cost savings for individuals and a reduction in overall energy demand.