





Welcome to Fight the Power!

Congratulations on your role as Building Captain for Fight the Power, Penn State's residence hall energy competition!

Between March 25th and April 14th residents in East Halls will compete to see which building can reduce its electricity the most. The hall that saves the most energy wins! You are **THE KEY** to the success of the competition!

In addition to competing against one another in East, we are also competing as a group in Campus Conservation Nationals. Our total electricity reduction in all 14 halls will determine how we fare against 200 other colleges and universities nationwide. This is the first time Penn State has competed and our success hinges on the efforts of our Building Captains and student leadership!

The document you are reading right now...

- Serves as an introduction to the competition
- Outlines your role as a captain
- Provides background information on energy at Penn State
- Lists resources to support you



This Challenge is Part of Something Bigger

Campus Conservation Nationals (CCN) is the largest nationwide electricity and water reduction competition on college and university campuses. CCN motivates hundreds of thousands of students to work together to reduce consumption and mitigate the impacts of climate change.

CCN 2013 is an opportunity to organize students and staff, host educational events, and challenge your friends to participate in fun events that can have an immediate and lasting impact on Penn State's carbon emissions and campus culture. Penn State is competing in CCN at two campuses, Behrend and University Park.

How Does It Work?

When is it? Fight the Power runs from March 25th – April 14th 2013 at University Park.

What is it? Students in East Halls compete in a 3-week energy competition for the greatest reduction in energy usage. Between March 11 and March 24, we will tally each hall's daily energy usage (in kilowatt hours) to establish the baseline. During the competition we will measure each hall's daily total energy usage and compare it to the baseline. The greatest percent reduction from the baseline rate wins.



How do we rank ourselves against other schools? The 14 buildings in East Halls compete against one another. The combined savings from all the buildings determines how Penn State fares against other CCN schools.

How can we track how we are doing: Participating schools have access to a Building Dashboard® where we can enter data from our utility meters, compare performance between our buildings, commit to conservation strategies, and track standings among the leading schools. The web address for our dashboard is www.buildingdashboard.net/psu.



What are the Goals of CCN?

Here are just some of the reasons that Penn State is participating in CCN:

- To engage, educate, motivate, and empower students to conserve resources in their residences.
- To achieve measurable reductions in electricity use, preventing thousands of pounds of carbon dioxide from being emitted.
- To foster a culture of conservation within our campus community and give voice to our campus sustainability initiatives.
- To empower students to teach themselves conservation behaviors that they can use in the future.
- To enable students to develop leadership, community organizing, and career development skills.
- To have fun!

Ultimately, It's All About Behavior Change

Activities that take place in buildings, including the residence halls, typically account for the majority of energy use (and total greenhouse gas emissions) associated with our campus. Penn State has done a tremendous amount to upgrade our infrastructure and increase resource efficiency; however, we also recognize that behavior change and education are critical to achieving our conservation goals. Competitions like Fight the Power are a fun way to engage, educate, and empower students to conserve resources and make changes in their own lives right where they live.

Together, we can make a lasting change for a better Penn State and a better world.



The Fight the Power Team and Your Role on It

You are now a member of Penn State's CCN team. Welcome aboard! This team has staff members from Residence Life, Housing, the Sustainability Institute, the Office of Physical Plant, and students like you. Each of these people has separate roles and responsibilities. This section of the manual outlines the **relationship of positions related to Building Captains.**

Energy Generals

The Generals have taken the lead on recruiting and designing the Captain responsibilities. This year's Energy Generals are Barry Hendler (a Coordinator in Pinchot, bdh15@psu.edu) and Ciara Hovis (a first-year student and Eco-Rep, clh5597@psu.edu). Together, they are your overall Points of Contact.

Building Colonels

Colonels are Eco-Reps or other people trained in event planning and organizing. These colonels are responsible for the following tasks:

- Call Building Captain meetings
- Set up events for the residence halls
- Support the ideas of Captains in their buildings
- Provide a point of contact for their hall

Residence Hall	Building Colonel	Email
Bigler	Devon Mayer	dvm5293@psu.edu
Brumbaugh	Giovanna Gonzalez	gwg5150@psu.edu
Curtin	Jake Pelini	jap5766@psu.edu
Geary	Rachel Robbins	rer5169@psu.edu
Hastings	Andy Narotsky	ayn5127@psu.edu
McKean	Gio Ambrocio	gba5012@psu.edu
Packer	Kirstie Cowie	klc5593@psu.edu
Pennypacker	Brisa Smith Flores	bms5515@psu.edu
Pinchot	Rachel Klinkatsis	rik5208@psu.edu
Snyder	Danielle Esplin	dle5098@psu.edu
Sproul	Victoria Gibliterra	vlg5076@psu.eu
Stone	Ivana Matijevic	izm5053@psu.edu
Stuart	Julia Schaller	jxs5631@psu.edu
Tener	Riley Mummah	rom5173@psu.edu

Building Captains

This is you! Your task is to get your hall to WIN! This manual was created to help you do just that.



How to Be a Great Building Captain



Your main function as a Building Captain is to create and maintain enthusiasm:

- Inform students about Fight the Power and encourage them to care
- Provide students with concrete, easy ways to conserve energy
- Foster pride by being an ambassador for the competition
- Encourage others to attend events like ice cream socials and events in Findlay
- Recruit new Captains the more the merrier ☺
- Have FUN! Keep in mind, that you want your hall to win! Be creative, be silly, and enjoy yourself.

What are some of the benefits of being a Captain for your hall?

- Free (and awesome) Fight the Power T-Shirt
- Student leadership experience that looks good on any resume
- Education on energy and conservation that will go with you wherever you live
- Free water bottle and mug
- Pizza party for all Building Captains on April 14 to celebrate the end of the challenge
- The winning hall gets pictures with the Nittany Lion!
- The hall with the most participation points wins an ice cream party for their hall.





The Second Way to Win: Earn Participation Points

Beyond **reducing electricity consumption**, there's another way for you and your hallmates to win: **Earn Participation Points**. Look below to learn how participation points can be earned. **Points will be tracked by Nick Kolesar (nsk5073@psu.edu)**, a member of the Fight the Power **planning team**. Make sure you get your points to Nick so he can keep an accurate tally.

1) Attend an official Fight the Power event (1 point per attendee). Throughout the competition, we will be hosting events and tabling in Findlay, where we will have giveaways, including mugs and water bottles. Invite people from your hall. The more people you bring, the more points you earn. Plus, it's gonna be fun!

Date	Event	Location
Sunday	Kickoff Event:	Findlay Commons
March 24	Food, Fun, and Music	8:00-10:00 p.m.
Wednesday	Ice Cream Party:	124 Findlay
March 27	Get the Scoop on Energy	8:00-10:00 p.m.
Wednesday	Sex in the Dark:	106 Fisher
April 3	UHS and Res Life Education Event	8:00-10:00 p.m.
Saturday	Tie-Dye in the Quad:	In the East Quad
April 6	Get Outside and Uplug	12:00-4:00 p.m.
Thursday	Conserve Energy, Conserve Yourself:	124 Findlay
April 11	Tried and True Stress Relievers	8:00-10:00 p.m.

Get creative and **schedule your own Events (1 point per attendee)**. Work with your Building Colonel to schedule events for your hall. Dress up to dorm storm, have a board game night, host a movie, power down for an hour, or get out and play!

Make it official and register as a Building Captain (3 points per Captain) at http://www.competetoreduce.org/buildingcaptains/

Have a room audit completed (2 points per room). Students from Engineers for a Sustainable World and the National Electrical Contractors Association will help you identify the biggest energy hogs and devise strategies to reduce your electricity consumption. Contact Jordan Crolly (jordan.crolly@gmail.com) or sign up at a table in Findlay.

Get people to go to www.buildingdashboard.net/psu and have them make a Commitment to Conserve Online (1 point per person). It's easy and it makes a difference.

At our events and during the challenge, students will aslo have an opportunity to **Commit to Conserve (1 point per person) with a Picture Pledge**. See p.8 for details.



Picture Pledges: A Public Commitment

A fun and effective way to talk to people about energy conservation and other sustainability topics is through the use of **picture pledges**. We invite community members to make a public pledge to adopt a specific behavior. The individual writes the pledge and we capture it with a photo, as you can see below. Pledges that are written down and publicized are more effective than those that are simply spoken.

I pledge to... be

Brighter

So I can use Less

Light: #Shinin'

People can also pledge their commitments at buildingdashboard.net/psu and earn participation points for their hall. Either way, your hall earns 1 participation point for each person who pledges.







Tips to Conserve Energy (And Some Event Ideas, Too!)

Winning the competition means reducing the most energy. How do you and other students do that? The tips below are simple ways for individuals to take action and for your hall to make a group effort. Get people into the competition by making it easy for them to make a difference!

Turn off the lights (or better yet, don't turn them on) and let the sun shine in. Make it an event to have an **hour-long lights out**.

Use Compact Fluorescent or LED light bulbs. One compact fluorescent bulb (CFL) saves \$30 in energy costs and prevents the emission of 1,000-1,200 lbs. of CO2 a year. Plus, they last 10 times longer than an incandescent bulb!





Plug in to power strips – or unplug your appliances when they're not in use. Your electronics use energy even when they are switched off. A power strip stops this "phantom load" with the flip of a switch. We can save up to 10% of our energy by foiling the phantom. No strip? Pull the plug! (Be sure to keep your refrigerator plugged in to prevent unintentional food spoilage.)

Activate the power-saving settings on your computer so it sleeps within 10 minutes. Turn off and unplug the computer at night. Left on all day, the energy to run a computer costs \$115-160 per year! It emits 1,500 lbs. of CO_2 into the atmosphere. More than one hundred trees are needed to absorb this amount of carbon dioxide.



Use cold water on your laundry. Cold cleans just as well (other than deep stains – soak 'em!), and it doesn't shrink your favorite jeans. Hot water uses up to 90% of the washing machine's energy, so cool it with cold!



Make each day of the week count! Try designating different actions that your whole hall can adopt for each day of the week. Make Monday, "Take the stairs day," make Tuesday, "No TV night," make Wednesday, "Game night," etc. Share the idea, post a list on all of the bulletin boards, and use Facebook to communicate. Repeat the list for weeks 1, 2, and 3.

Go outside and play. Get everyone together to play volleyball or throw a Frisbee during the day. At night, organize a game of flashlight tag or walk to the Creamery. Games are free, healthy, and fun. Plus, when you're outside, you're not using electricity inside. What if the weather's bad? Have a board game or movie night. Even if you're using power, gathering the group together is better than using electricity individually.



Nine Ways for Your Hall to Beat the Competition!

1. Talk to folks in person; Face-to-face communication is the most effective

- a. Tabling is a great idea Ask your Building Colonel to help you out
- b. Go door-to-door
- c. Don't be afraid to give them gifts we have lots of water bottles!

2. Educate at the door

- a. Be prepared with facts (see p. 9 and talk to Building Colonels)
- b. Make quarter sheets with information on the competition
- c. Let them know how it helps Penn State and the environment (see p. 11)
- d. Let them know how to schedule a room audit (see p. 7)

3. Go to events, and get others to come with you

- a. Earn participation points and educate. Let the events do the work for vou!
- b. Make it a group activity and go as a building (see p. 7)
- c. Have your own events. Earn participation points for each attendee.

4. Help people Commit to Reduce – via the dashboard or in person

- a. Let them know about buildingdashboard.net/psu and participation points
- b. Use the mini-white boards and get picture pledges (see p. 8).
- c. Public commitments are correlated with changes in behavior.

5. Build in-building visibility

- a. Keep the contest visible by painting your hall's windows
 - i. Have a painting party with food
 - ii. Recruit new Building Captains
- b. Make and hang signs for building events and events in Findlay
- c. Create new bulletin boards with your Building Colonel
- d. Make Handouts/Fliers about the challenge and ways to reduce
- e. Use Social Media, especially Facebook, to promote the challenge
- f. Promote the cause in Stall Stories

6. Increase the intensity

- a. Dress up and get enthusiastic
- b. Have fun and encourage others to play with you
- c. Get others to attend events in a group (see p. 7)

7. Work with RAs

- a. Hall meetings and Community Builders are a way to get people involved
- b. Don't expect RAs to do the work for you, but use them as a resource
- c. Ask for ideas

8. Have weekly Building Captain meetings with your Building Colonel

- a. Weekly updates
- b. Group meetings (may need assistance)

9. Make a Model Residence Hall Room

a. Showcase an example of an energy-efficient room – for tips go to http://www.treehugger.com/htgg/how-to-go-green-dorm-rooms.html



Why Should You Care About Energy

Each year Penn State University campuses use more than 300-million kilowatt-hours (kWh) of electricity. This is the equivalent to the usage of 23,000 homes!

Using that much power isn't cheap. Although we produce some electricity in our steam plants through a process called cogeneration, we purchase the vast majority of our electricity. To power Penn State, we spend about \$24 million on electricity annually. Think about that for a second; in just six months we spend the same amount of money the students raised for THON in 2013. Incredible!

We get our energy from the conversion of the primary sources, mainly coal and natural gas, that produce pollution and greenhouse gas emissions. By conserving energy, we reduce greenhouse gas emissions, save money, and show we can make the smart choice.

Over Just One Week...residents in East Halls use about 117,000 kilowatt-hours of electricity.

- That is equivalent to the **emissions from 9,100 gallons of gasoline.** It would take 2,082 tree seedlings grown for 10 years to sequester this amount of carbon.
- It equates to spending more than \$8,000 a week (!) to power East. You could supply energy to 10 homes for an entire year with the electricity we use over a seven-day period!

As a building captain, you have an incredible opportunity to positively affect the world simply by convincing others to reduce their use!

A Success Story Worthy of Your Attention

Although Penn State added more than 1 million square feet of building space in the past five years, we achieved our goal of reducing our greenhouse gas emissions 17.5% below 2005 levels in the same time period. Retrofitting buildings, purchasing renewable energy credits, and encouraging a reduction in personal energy use contributed to this achievement. Your work makes a difference!