



Purchasing Carbon Offsets: *Accounting for Emitting*

Requirement:

The source of heat for at least a portion of your campus must be fuel oil, natural gas, propane, wood, pellets, biofuel, kerosene, coal or other combustible fuel. If electric heat is used, purchase 100% renewable electricity.

Why Do It:

According to the EPA, as much as 12% of the nation's total greenhouse gas emissions stem from the combustion of natural gas and petroleum products for heating and cooking needs. This totals more than 560 million tons each year. Research conducted by The Rocky Mountain Institute indicates "eliminating most of the emissions produced by the burning of natural gas, oil or propane in American homes and businesses for heating and hot water" will be imperative to reach "deep decarbonization" goals.

This imperative is particularly relevant to facilities with comparatively high heating demands, like conservatories and greenhouses. But given the unique nature of these buildings, conventional efficiency-enhancing strategies to reduce heating demand may not always be possible. In these cases, offsetting your carbon can be an effective way to account for your carbon and can demonstrate to your public that you are committed to greener operations.

How it Works:

Reducing greenhouse gas emissions is the goal, but no matter who or where you are, you can start accounting for the carbon you are emitting right now.

A carbon offset represents one ton of carbon dioxide equivalent (CO₂e) that hasn't been emitted into the atmosphere. Individuals or organizations purchase offsets that come from on-the-ground projects and activities to reduce carbon emissions.

There are several options available when purchasing carbon offsets. The first step is to calculate your own carbon footprint related to heating through auditing your utility bills or using online calculator such as Word Resource Institute's [Greenhouse GHG Protocol](#).

Brokers, like [Native Energy](#), can then help you identify projects that align with your goals. There is a significant body of projects from local forest management to cookstove upgrades in developing countries. When choosing a project, it is important to confirm that the credits are validated and verified by independent auditors, such as the [Verified Carbon Standard](#) (VCS), [Green-e Climate](#), or the [Climate, Community, and Biodiversity Alliance](#) (CCBA). Once a source project(s) are chosen, you purchase the credits which are then retired.

Phipps is currently exploring the possibility of off-setting our carbon emissions from heating through our own projects, like installing additional solar arrays on campus or other capital projects that increase efficiency and therefore mitigate CO2 emissions. This route will require creating a methodology including a project timeline, measurable goals and verification from a reputable auditor and verification system.

Why It Works:

Phipps has been purchasing carbon offsets for the greenhouse gas emissions related to heating since TK. Although we have taken steps to reduce heating-related carbon emissions, the historic designation of the conservatory precludes some energy-saving strategies. Purchasing offsets allows us to account for these emissions and demonstrates our continued commitment to green operations.

In the case that we would invest in projects at our own facility, rather than paying third party projects, we will reduce our future years of carbon production as well as financial costs.

Obstacles:

It should be noted that purchasing offsets should not supersede efforts to reduce greenhouse gas emissions. For budgeting purposes, note that the market for carbon offsets fluctuates and can vary greatly depending on the specifics of the project being supported.

Messaging:

We are making every effort to reduce our carbon footprint. For the emissions that what we are unable to stop right now, we purchase offsets. These ensure that the same amount of CO2 that would otherwise have been emitted offsite is not.