



## **Climate Action: *The Time Is Now***

### Requirement:

Teach facts and best practices to mitigate and reduce global climate change

### Why Do It:

Climate change is an existential crisis. [Tipping points](#) for irreversible changes to the Earth's systems are fast approaching, if they have not already been passed. Significant action cannot be delayed.

### How it Works:

As climate change is the defining issue of our time (and the future's), everything Phipps does recognizes that the time to act is now. From purchasing policies to what we serve in the café, climate change and our impact is considered.

In a visitor survey of nearly 1,000 guests, Phipps learned that nearly nine out of ten Phipps guests consider climate change a threat and are seeking easy-to-understand information to take action. Phipps understands that climate change is a topic that can feel so daunting that people may think they cannot have an impact. But the climate change attitude survey we conducted demonstrated that not only does the majority of our visitors believe anthropogenic climate change is occurring, but are also looking for actions they can take to mitigate it.

For the guest, we strive to connect them to the beauty of living in harmony with the natural world. Through these connections, guests are likely to be more conscious of their behaviors and their impact on the systems in which they operate. We also want to balance this fostering of a deeper connection with tangible, actionable steps guests can take.

Signage on site explores the basic tenets of climate change and reframes the approach to addressing it not through austerity and sacrifice, but through actions that are actually good for us and the planet (better food, more plants, less stress). This message is carried through more extensively in our new [Planets Earth](#) exhibit. This exhibit explores our planetary boundaries and how we are currently outside of them, and provides a new way to think about addressing these issues. It presents a framework based on the need to shift from extractive, "do good," and sustainable paradigms to a regenerative one. When we do so, we not only improve the human condition but the health of the ecosystems of which we are a part improve. Resources in the exhibit, including [Drawdown](#), [Handprinter](#) and the [Story of Solutions](#) offer guests positive, engaging ways to address climate change.

As climate change is daunting, we wanted to give guests the opportunity to do an actual action when on site that has impact. A partnership with Green Mountain Energy allows guests to switch to green power for their household during their visit and in return, they receive a free one-year membership (or six month extension for current members) to Phipps. Each household that switches will eliminate the approximate 8 tons of carbon dioxide emissions that the average PA home emits each year powering their home. This not only gives the guest the satisfaction of knowing that they have made an impact, but there is empirical data showing the impact: at the time of this writing, Phipps guests have mitigated at least 37,000 tons of CO<sub>2</sub>.

As this program has shown, guests are looking for actions to take but don't necessarily know where to start or what is most effective. In response to this feedback, we created the online resource [Easy Steps with Big Impact for Climate Change](#). These simple but effective steps can help anybody reduce their carbon footprint.

For area high school students, Phipps offers a six-week paid Learning for a Greener Future internship. The program offers a variety of work experiences, classes, community service projects and field trips in the diverse fields of environmental and plant sciences. Included in this is the [World Climate Simulation](#), a role-playing exercise of the UN climate change negotiations for groups. This free program offered by [climateinteractive.org](http://climateinteractive.org) enables participants to "experience some of the dynamics that emerge in the UN climate negotiations." Framed by current climate change science and real-time interactive computer simulations, participants get first-hand experience seeing how policies impact the global climate system in real-time, and frames their own experience relative to those to others around the globe.

#### Why This Works:

Climate change has become politicized. This may deter museums and other cultural institutions from addressing it. It is not, however, a political topic, and knowing your audience is key in developing effective programming that is effective and meets the needs of your visitors. The [Yale Program on Climate Change Communication](#) offers numerous resources for addressing climate change. They offer a [Six Americas Super Short Survey](#), a tool that asks a handful of questions concerning climate change. This condensed survey is a segmentation tool the site performs segmentation analysis for you. This can inform you as to where your visitors stand on climate change—where they fall on the [Global Warming's Six Americas](#) framework. They also provide guidance on what strategies and referent frames are most effective in reaching your segment(s).

#### Obstacles:

Climate change can be a polarizing topic. But knowing your audience and their needs, and being deliberate in your approach can lead to effective climate change communication and action.

#### Messaging:

*Climate change is a big topic, but together, today, we can make a change.*



## MORE FLOWERS

Plants convert carbon dioxide into oxygen, so a world with more trees, plants and flowers is a world with fewer greenhouse gases.

### At Phipps

- Phipps has been bringing beautiful plants to Pittsburghers and others for over 120 years. From our energy-efficient production greenhouse to capturing and reusing rainwater, Phipps cares both about what we grow and how we grow it.
- With all the plants at Phipps, we end up with a lot of clippings. 100% of this is composted, providing natural, nutrient-rich fertilizer, which keeps our gardens healthy while reducing carbon emissions.

### At Home

- There's something inherently appealing about growing and nurturing plants. Enjoy this beauty and pleasure in your yard by planting more native plants, and/or trees shrubs and perennials which require minimal watering and pesticides.
- Looking for some suggestions or advice? Phipps is here for you! Our annual Top Ten Sustainable Plants list is a great resource. We also offer Ask Dr. Phipps, a free hotline that helps you keep your garden growing! [phipps.conservatory.org/drphipps](http://phipps.conservatory.org/drphipps)



## BETTER FOOD

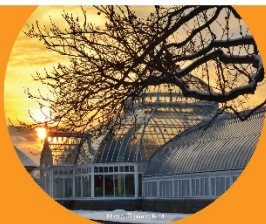
Responsible food production practices produce delicious and healthy food, as well as fewer greenhouse gases.

### At Phipps

- Outside this window is Phipps' rooftop edible garden. Farmer Mike harvests over half a ton of organically grown fresh produce each season for use here on campus, including at Café Phipps.
- Our 3-star Green Restaurant Certified® Café Phipps has been featured as one of the country's best museum eateries by *Food and Wine Magazine*, demonstrating local, healthy food can be good for the environment as well as being delicious.

### At Home

- Choosing local gets you the freshest fare and cuts down on the carbon emitted when food is transported long distances. Check out farmers markets or even try growing your own vegetables in containers in your yard or on your porch.
- A diet rich in whole grains, fruits and vegetables is healthy and raising livestock produces a lot of greenhouse gases. If everybody in the Pittsburgh metro area went meat free just one day a week for a year, it would be the equivalent of removing 149,000 cars from the road for a full year.



## IS IT WARM IN HERE?

Greenhouses like this are used to grow a variety of plants that would not survive a Pittsburgh winter. All the glass allows lots of sunlight to pour inside helping the plants to grow.

One side effect is the inside heats up, the same glass that lets the sunshine in keeps the heat from escaping. This is commonly known as the **greenhouse effect**.

The same thing happens to the earth. But instead of glass trapping the heat, greenhouse gases — things like carbon dioxide — trap it. The more greenhouse gases there are in the atmosphere, the more heat is trapped. There are more greenhouse gases in the

atmosphere now than there have been in the past 650,000 years, hence the changes in climate and extreme weather events we are experiencing.

### So what to do?

Addressing climate change means reducing levels of greenhouse gases in the atmosphere. It may seem that this requires sacrifices and changes that will make our lives more difficult, but that is not true! Human and environmental health are interdependent, so there are many things we can do that improve and enhance our own lives while also reducing greenhouse gases.

Think of a world with **more flowers, better food and less stress**. This is a world with fewer greenhouse gases.



## LESS STRESS

Spending time outdoors has positive physical and mental effects on us, and makes us better stewards of our planet.

### At Phipps

- We all share an innate connection to the natural world. Celebrating this connection guides all of our operations and programming, from inspiring seasonal flower shows to the solar panels that power the Center for Sustainable Landscapes.
- The Phipps Research Institute for Biophilia and Science Engagement works to understand the connections between human and ecological health and communicate the findings by developing innovative educational programming for children and adults.

### At Home

- Regular walks help you maintain a healthy weight, prevent or manage heart disease, high blood pressure and other conditions. And since transportation accounts for about 30% of carbon dioxide emissions, walking instead of driving is a win-win.
- Get outdoors. Studies show that children who play outside are more creative in their play, less aggressive and show better concentration, while time outdoors benefits mental and physical health of adults and is even being prescribed by some health care professionals.



“There is healing in the trees for tired minds and for our overburdened spirits...Remember that nature is your great restorer.”

~ Calvin Coolidge