The Climate Toolkit Symposium 2025

# Essence as Compass

Guiding Climate Action with Regenerative Thinking

10.28.2025

# Session Leaders



Richard Piacentini

Phipps Conservatory and Botanical Gardens



Sonja Bochart

Lens | Shepley Bulfinch

# Agenda



# The Climate Toolkit

a collaborative opportunity for museums, gardens, zoos and other cultural institutions who want to share, mentor, and learn from each other on how to aggressively address climate change within their own organizations and inspire the communities they serve to follow their lead.

FREE to JOIN

Learn more and sign up:

www.climatetoolkit.org



### In partnership with









Association of Science and Technology Centers



Organization of Biological Field Stations

More than 240 institutions from 30 countries serving 120 million annual visitors and counting

- Webinars to educate and engage
- Topically focused working groups
- Regenerative thinking workshops
- Online resources to achieve goals around buildings and energy, water, food service, transportation, waste, landscapes and horticulture, investments, research and engagement
- Youth Network for student groups
- Facilitated connection with peer institutions

# Climate Toolkit: Nine Focus Areas









**Food Service** 









Landscapes and Horticulture



Investments



Engagement



Research

# Climate Toolkit: Focus Areas & Goals

#### **BUILDINGS AND ENERGY**

- Meet your nation's Paris Agreement targets for CO<sub>2</sub> reduction
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- Ensure existing buildings achieve an Energy Use Intensity (EUI) 35% below median
- Decarbonize your glasshouse facility

#### **WATER**

- Reduce municipal water use by at least 25%
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#### **FOOD SERVICE**

- Ensure 40% of menu items are vegan or vegetarian
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#### **TRANSPORTATION**

- Offset carbon for all work-related staff travel
- Make 25% of vehicle fleet electric (excluding tractors)
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- Incentivize visitor sustainable travel

#### WASTE

- Eliminate all single-use plastic in food service, horticulture, gift shop, and all other facilities and operations (exceptions for research-specific use)
- Compost 100% of food waste
- Eliminate the sale or use of bottled water
- Recycle or reuse all recyclable materials including metals, glass, and plastic

#### LANDSCAPES AND HORTICULTURE

- Ensure 25% of lawn/garden maintenance equipment is electric
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 Convert parking spaces into greenspaces to combat the rising temperature in cities

#### **INVESTMENTS**

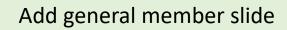
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- Invest in socially responsible investments

#### **ENGAGEMENT**

- Engage youth in climate advocacy and action
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#### RESEARCH

• Initiate region-specific research related to climate change





Adkins Arboretum Ridgely, Maryland



Anchorage Museum Anchorage, Alaska



Asheville Art Museum Association Inc. Asheville, North Carolina



Bernice Pauahi Bishop Bernheim Arboretum and Research Forest Museum Clermont, Kentucky Honolulu, Hawai'i



**Bok Tower Gardens** Lake Wales, Florida



Garden

Tamna FI

Claremont, California

California Indian Museum and Cultural Center Santa Rosa, California



Cambridge University Botanic Garden Cambridge, United Kingdom



Carnegie Museums of Pittsburgh Pittsburgh, Pennsylvania



Cedarhurst Center For the Arts Mount Vernan, Illinais



Chesapeake Bay Chanticleer Garden Maritime Museum Wayne, Pennsylvania St. Michaels, Maryland



Cincinnati Art Museum Cincinnati, Ohio



Coastal Maine Botanical Cornell Botanic Gardens Gardens Boothbay Maine Ithaca, New York



artsPlace

Alberta, Canada

Denver Botanic Gardens Discovery Museum Denver Colorado



**Duke Farms** Little Rock, Arkansas



Filoli Center Hillshorough Township New Jersey Wandside California





Florida Aquarium Folger Shakespeare Library Washington, D.C.



Green Bay Botanical Garden Green Bax, Wisconsin



Hillwood Estate, Museum and Garden Gardens Washington D.C. Kirtland, Ohio



Horniman Museum and Huntsville Botanical Gardens London, United Kingdom



Garden Huntsville, Alabama



Jacksonville Arboretum & Botanical Gardens Jacksonville, Florida



**Key West Tropical** Forest & Botanical Garden Key West, Florida Montreal Space for Life



Lady Bird Johnson Wildflower Center



Lewis Ginter Botanical Gardens Garden Henrico, Virginia



Sarasota, Florida

Marie Selby Botanical



Marine Aquarium & Regional Centre. Zoological Survey of India West Bengal, India



Meadowlark Botanical Gardens Vienna, Virginia



Monterey Bay Aquarium Monterey, California



Morris Arboretum Philadelphia, Pennsylvania



Lisle, Minais

Morton Arboretum Mount Auburn Cemetery Cambridge, Massachusetts



Mt. Cuba Center Hackessin, Delaware



Museum of Discovery and Science Fort Lauderdale, Florida



National Nordic Museum Seattle, Washington



Jardin botanique de

Botanical Gardens,

la vie/ Montreal

Québec, Canada

Montreal, Espace pour

Natural History Museum of Utah Salt Lake City, Utah



New York Botanical Garden Bronx New York



Norfolk Botanical Garden Norfolk, Virginia



North Carolina Botanical Garden Chapel Hill, North Carolina



Oakland Zoo and Conservation Society of and Arboretum California Oakland, California



Oxford, United Kinedom



Oxford Botanic Garden Phipps Conservatory and Botanical Gardens Pittsburgh, Pennsylvania



Pittsburgh Zoo and Aquarium Pittsburgh, Pennsylvania



Quest Science Center Livermore, CA



Red Butte Garden Royal Botanic Garden Edinburgh Salt Lake City, Utah



Royal Botanic Gardens, Kew England, UK



Sacramento History Museum Sacramento, California



San Diego Botanic Garden Encinitas, California



Santa Barbara Botanic Santa Fe Botanical Garden Garden Santa Barbara, California Santa Fe, New Mexico



Sarah P. Duke Gardens at Duke University Durham, North Carolina



Science Museum of Minnesota Saint Paul, Minnesota



Science World Vancouver, British Columbia



Washington, D.C.

South Coast Botanic Garden Palos Verdes Peninsula, California



Strawbery Banke Museum Portsmouth, New Hampshire



The Jerusalem Botanical Tower Hill Botanic Gardens Jerusalem, Israel



Garden Boylston, Massachusetts



Edinburgh, UK

Washington Botanic New Jersey Gardens Summit, New Jersey Seattle, Washington



Watermen's Museum Yorktown, Virginia

# Wake-up:

# Climate Toolkit Starting Point

Review the Climate Toolkit and identify your top 3 focus areas (5 minutes).

Take a moment to reflect....

Why did you select the way you did?

Share with a partner (5 minutes)



# Climate Toolkit: Focus Areas & Goals

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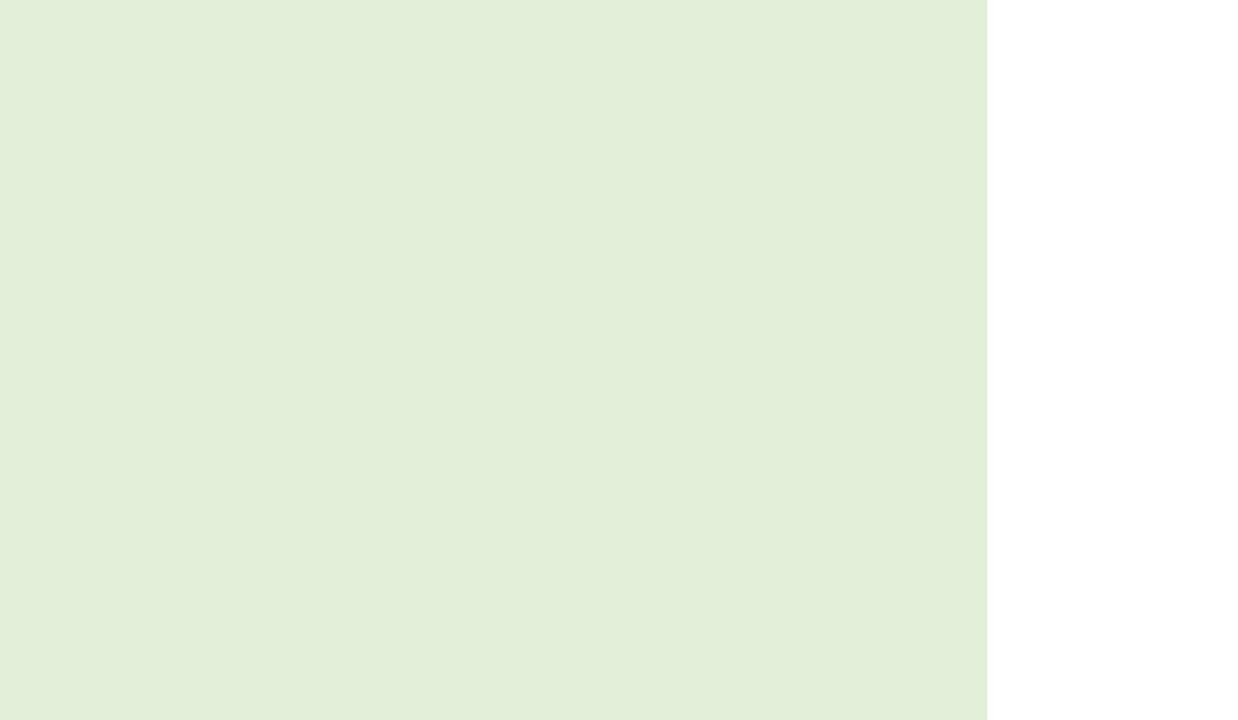
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# Four Paradigms for Interacting with the World

### **EXTRACTIVE**

- Exchange Value
- About Me
   Disconnected
- Fragments

### LESS BAD

- Less Bad
- About Us Interconnected
- Fragments
   Stabilize them

### DO GOOD

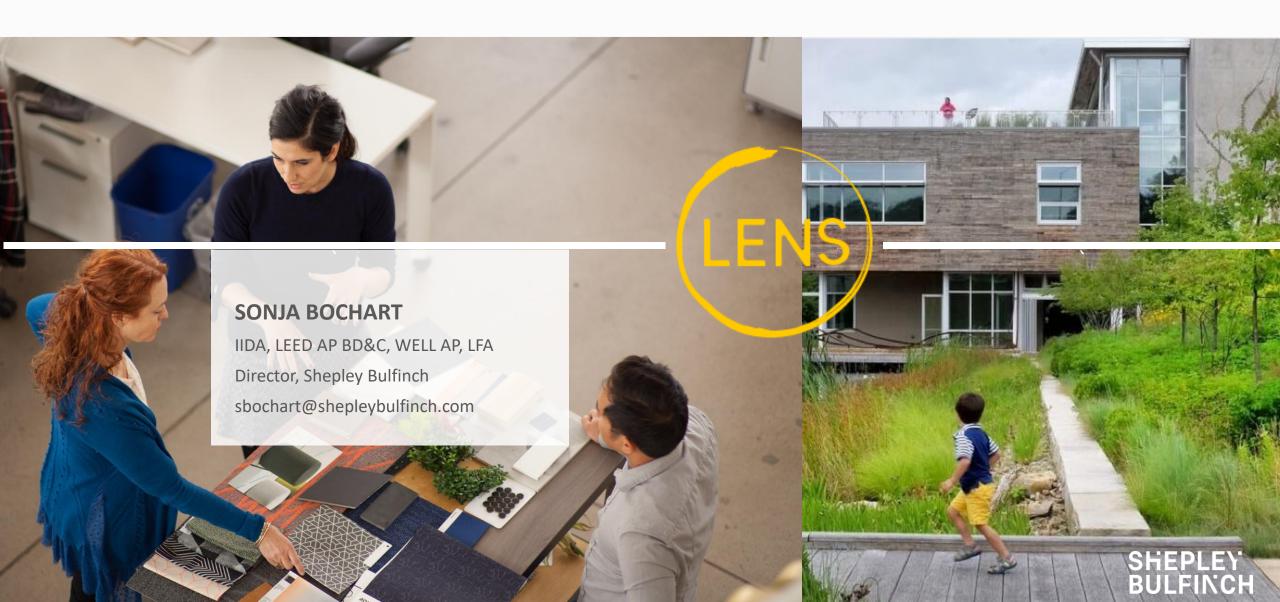
- Do Good
- About Us Reciprocity
- Fragments
   Improve them

### REGENERATIVE

- Evolve Capacity
- About Us
   Relationships
- Wholes

Adapted from Carol Sanford

## Is your project, team, organization reaching its potential?



# Climate Action & Nested Systems



Within every individual, organization, and place exists an Essence — a living expression of its uniqueness and inner potential.



Rubbing with wax Crayon of Douglas Fir (Left) Inked Fingerprint (Right)

Source: Nina Montenegro

### Mission, Vision, Values:

- What you do
- What you aim to do
- How you behave

### **Essence**:

Essence is the unique way an organization contributes life and value to the world when it's functioning at its highest potential.

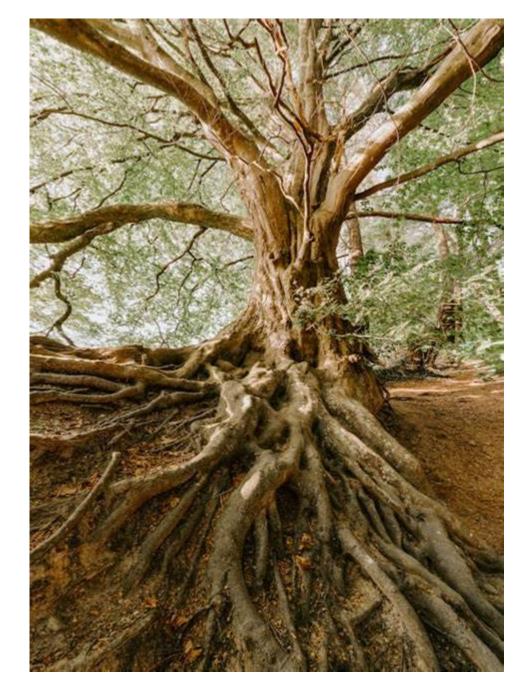


North Star

It is not a fixed identity - but a potential waiting to be fulfilled.

It is who an organization is at their deepest level—and what they are called to become."

— Pamela Mang, co-founder of Regenesis Group





### Value of working from Essence:

**Clarity and Alignment:** Guides decision-making, keeps actions aligned with the organization's core purpose.

**Authenticity:** Builds trust with stakeholders by showing consistency between words and actions.

**Differentiation:** Sets the organization apart by staying true to what makes it unique.

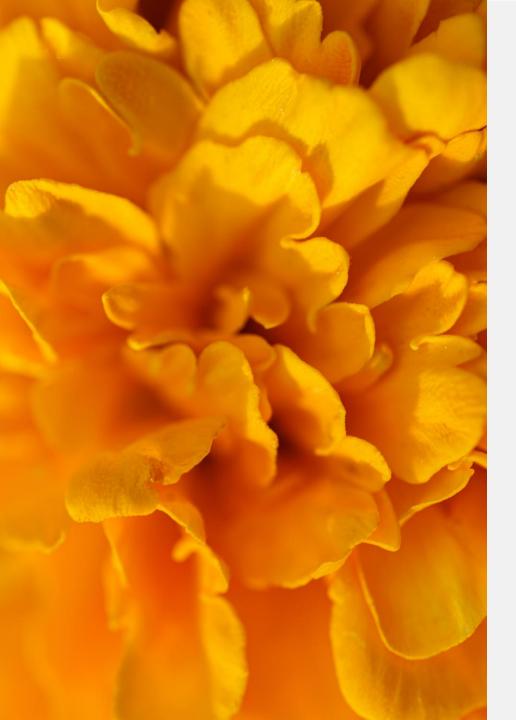
**Resilience:** Helps the organization stay grounded and adaptive in times of change or crisis.

**Inspiration:** Motivates employees and attracts stakeholders who share the same values and purpose.



### When we don't work from Essence:

- Confusion about why we exist in the first place limiting stakeholder and community alignment.
- "Do good" Mentality instead of building from our own strengths which limits us reaching our potential.
- Misalignment between our values and our actual behaviors.
- Unrealized Potential missed opportunities for growth, service and innovation.



# Phipps Conservatory and Botanical Gardens

### Mission:

To inspire and educate all with the beauty and importance of plants; to advance sustainability and promote human and environmental well-being through action and research; and to celebrate its historic glasshouse.

### **Essence Statement:**

Phipps seeks to: illuminate the beauty and vitality of nature in a way that inspires us, individually and collectively, so that we embrace and nurture our relationship and responsibility to the Earth and all life.

# Anchorage Museum

### Mission:

To be a museum for people, place, planet, and potential, in service of a sustainable and equitable North, with creativity and imagination for what is possible.

### **Essence:**

My organization seeks to: Seed caring and curiosity about place and culture in a way is collaborative, relational, inclusive & joyful so that our shared commitment to the complex identities, distinct environments and diverse perspectives contributes to a thriving North.



# Organization Purpose Statement

Your organization's purpose statement is an expression of its essence that serves as a "north star" to keep you grounded as you explore new projects and ideas. It describes your purpose, process, and value.

My organization seeks to \_\_\_\_\_

In a way that \_\_\_\_\_

So that \_\_\_\_\_



# Activity: Organizational Essence

Write a short

purpose statement

as a starting point

for your

Organizations

Essence (North

Star).

My organization seeks to:

In a way that:

So that:

# Community Essence

People
Social Systems
& Communities

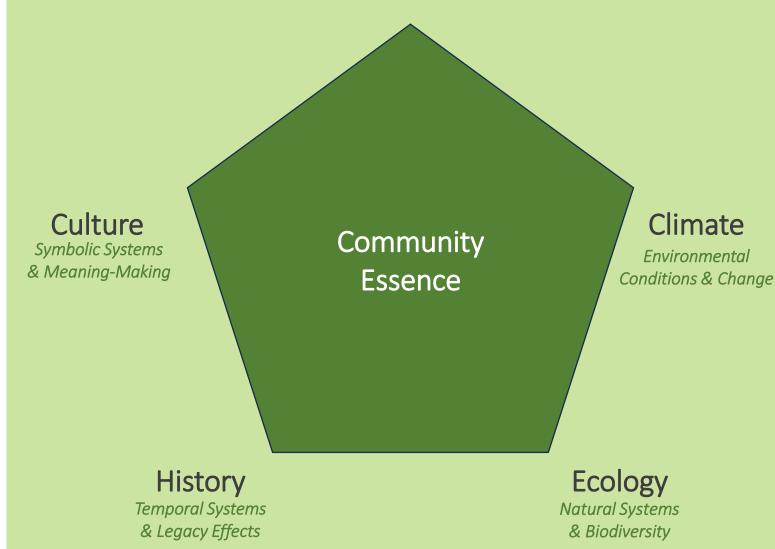
Consider the five aspects of the Community Essence pentad one at a time.

Identify them. What makes them unique? What are their strengths?

What challenges do they and will they face in the future?

What resonates with them? What do they consider important?

Where do you see the greatest opportunity to learn more? Where do knowledge gaps exist?



Community Essence

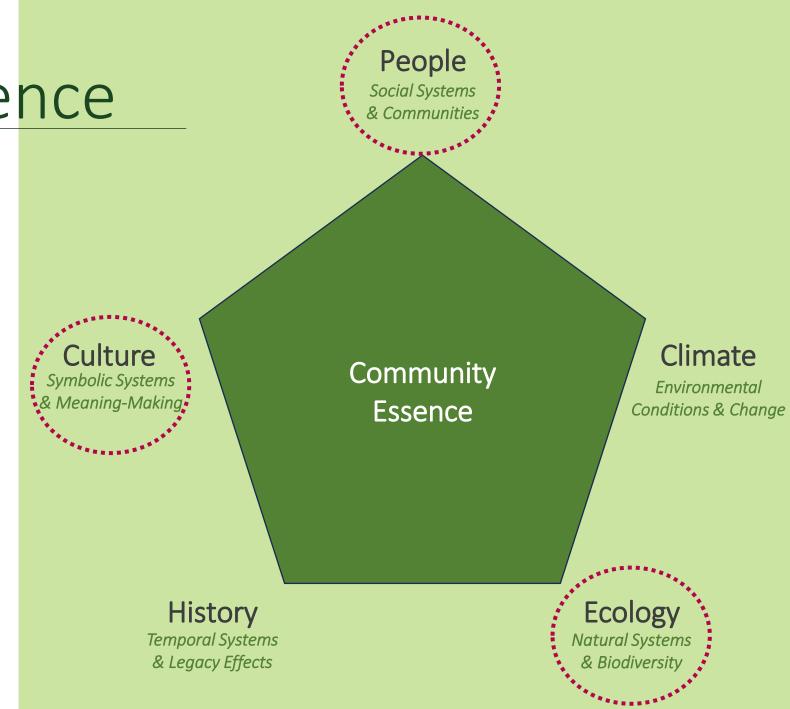
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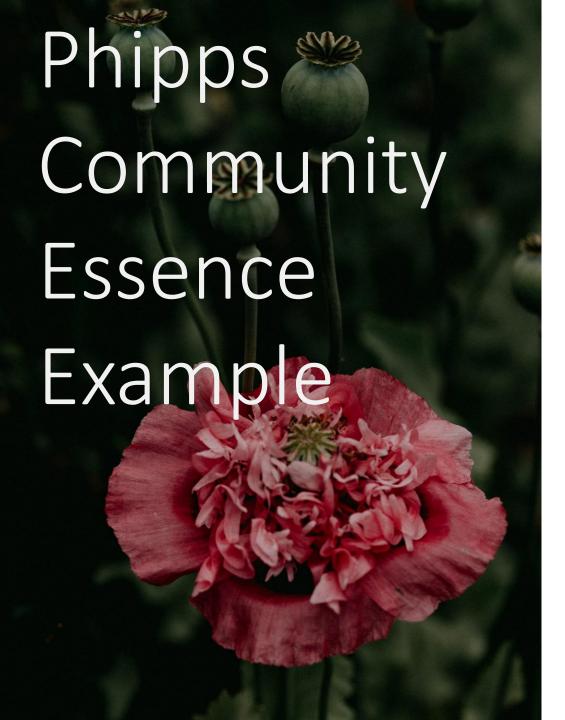
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### **People (Social Systems & Communities)**

- A historically working-class population shaped by steel and coal labor.
- Strong immigrant communities (e.g., Italian, Polish, Slovak, Irish) and a large Black population with deep roots in the Hill District.
- Leading Medical and University Research Institutions. Tech industry influx (e.g., CMU and Google) bringing in highly educated newcomers.
- Stark racial and economic disparities
- Resilient neighborhood-level organizing and community advocacy (e.g., Hazelwood Green redevelopment input).

### **Culture (Symbolic Systems & Meaning-Making)**

- Local pride in dialect ("Pittsburghese"), sports teams (Steelers, Pirates, Penguins), and traditions.
- Rich artistic legacy: playwright August Wilson, Andy Warhol, and growing contemporary art scenes.
- Annual events like the Three Rivers Arts Festival or light-up night reflect public engagement and shared ritual.
- Deep musical and jazz history rooted in the Hill District.

### Ecology

- Forested hills and river valleys
- Urban biodiversity and green spaces
- River and watershed restoration
- Legacy industrial pollution challenges
- Expanding tree canopy coverage

# Activity: Community Essence

Describe some of your local, unique community essence.

| Culture | People | Ecology |
|---------|--------|---------|
|         |        |         |
|         |        |         |
|         |        |         |
|         |        |         |
|         |        |         |
|         |        |         |
|         |        |         |





# Climate Toolkit: Nine Focus Areas















Landscapes and Horticulture



Investments



Engagement



Research

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# Activity: Unlocking Essence

Consider your
Organizational and
Community Essence...

### **Focus Areas:**

Review/refine from
The Climate Toolkit 2-3
focus areas that your
organization is
uniquely positioned to
address.

# **Your Organizations Focus Areas:**

1.

2.



# Phipps Example





# Global Imperatives (Local Issues)

- Buildings and Energy (air quality, fossil fuel based)
- Water (combined infrastructure)
- Expansive fossil-fuel based monoculture lawns



**BUILDINGS AND ENERGY** 

**WATER** 

LANDSCAPES AND HORTICULTURE

### Organization Essence

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in a way that inspires us, individually and collectively, so that we embrace and nurture our relationship and responsibility to the Earth and all life.

### **Community** Essence

Former steel city,
historically working class,
now tech focus
Pittsburgh pride, sports,

arts and jazz
Shaped by rivers
Urban wildlife & green
spaces

Four seasons with frequent precipitation

### We're here to help with your continued work.

**CONTACT** 

Richard Piacentini: <u>rpiacentini@phipps.conservatory.org</u>
 www.Phipps.conservatory.org

• Sonja Bochart: <u>sbochart@shepleybulfinch.com</u> www.shepleybulfinch.com

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# Thank You





# Global Imperatives (Local Issues)

- Water supply/stress (not currently an issue)
- Transportation
- Buildings and Energy (heat waves, urban heat island)
- Growing too fast/cost of living Climate refugees (from the west)
- Heat island
- Storm intensity
- Tree canopy (grow and preserve)

## Institutional Essence

My organization seeks to: connect people to nature and create life-enhancing experiences.

**In a way that:** fosters care, and multitude of and meaningful engagement in the community

**So that**: open up people to new experiences – change their outlook, shift mindset ... help transform peoples' lives and their relationship with the planet.

## Community Essence

- pre-glacier history, rivers ecosystem
- manufacturing / immigration history (working class)
- highly-educated, statistics, uptick in Tech,
   Community and volunteerism
- Church, vibrant music/arts,
- Agriculture is a mainstay
- Community pride/care for ecosystem
- Engagement as a core focus area

What are the points of intersection with the greatest potential?

Current focus areas: engage and teach. more important thing.

Work with community partners – Ohio state, Columbus community action plan

+Food – accessibility, utilization, healthy food, water, affordability?

+Waste: single use plastic, compost, recycling,

+Landscape

+Energy: electrical vehicles and equipment, No Mow areas

**Action steps for 1-5 years - current** 

Continue to be a place where community can see things in action. - replicate at home. demonstration, learning, -

Becoming more intentional



### **Global Imperatives**

- **Buildings and Energy**
- Landscapes and Horticulture
- Electrification
- Waste (specifically wood)

### Institutional Essence

My organization seeks to connect people to nature and science

### In a way that

fosters awareness, understanding, appreciation, curiosity and care

### So that

people and trees thrive and endure together

### Communit Essence

- People have a sens ownership of the ar
- Forest-prairie interfa unique
- City feels disconnect communities arboretum, especia underserved

### 1. Wood Waste and Carbon Storage



### What happens now:

- Dead or sick or invasive trees are chipped, dumped, turned into mulch, quick to decompose, carbon goes to atmosphere
- Forests are worse chopped and often burnt immediate carbon-to-atmosphere

### What could happen instead:

Biochar could stay in soil for centuries, very stable for carbon sequestration

### **Community:**

What's in it for the community -- doing it the right way (biochar must be done carefully and safely) and making available to the community as an amendment (charitably, or perhaps as a sort of CSA model)

### 2. Green Electricity in Homes

Arboreta can present a baseline understanding of what your options are for green electric and how you can do better

Strong desire for We Harnessing Arbnet is a possible network-based multiplier and nature engager (arboreta worldwide sharing this information with their

> Visuals to "help the trees combat climate change' (EPA greenhouse gas equiv calculator math)