

Pollinator Friendly *@* Illinois

Brent Lewis

University Landscape Architect

January 16, 2020

I ILLINOIS

Climate Commitments



The Climate Commitment

Integrates a goal of carbon neutrality with climate resilience and provides a systems approach to mitigating and adapting to a changing climate. Designed to blend these two critical components of climate leadership.

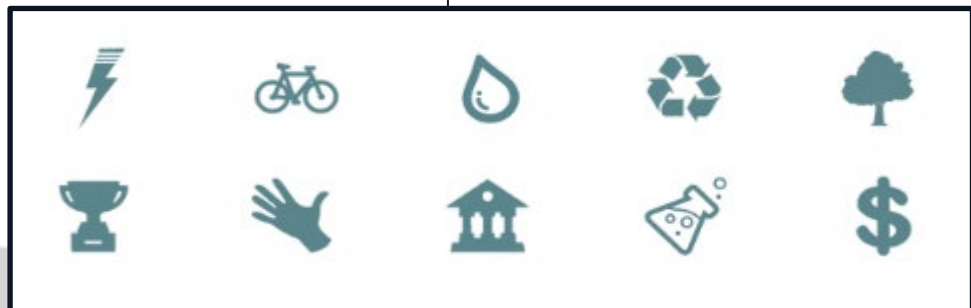
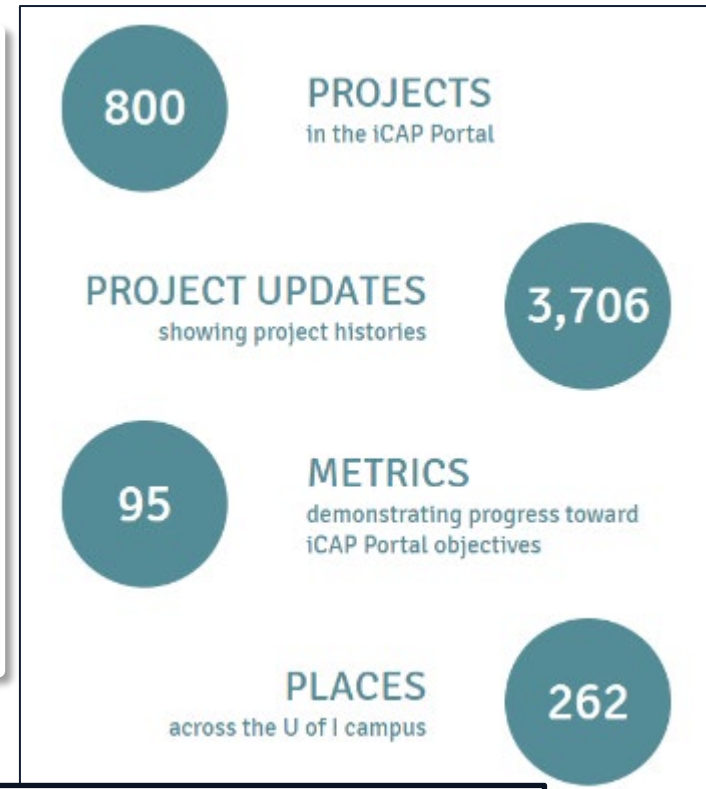
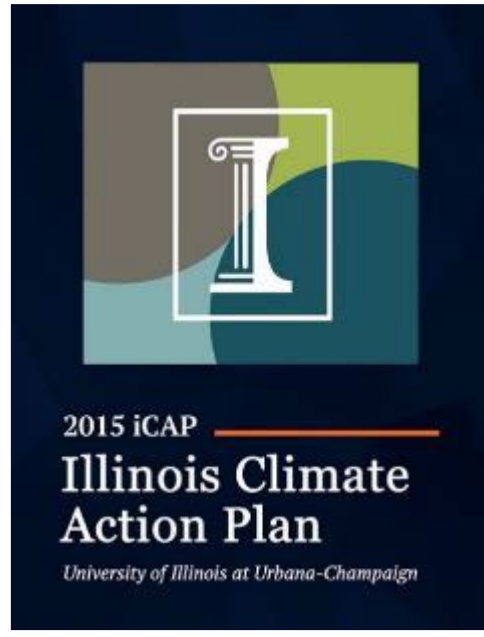


- Signed by 500 leading American higher education presidents and chancellors
- 2008: U of I signed the Carbon Commitment, pledging to be carbon neutral as soon as possible
- 2016: U of I signed the Resilience Commitment, creating a joint task force with local mayors



Illinois Climate Action Plan

- Strategic Plan for meeting the climate commitments
- Specific goals and objectives for several topics and themes
- Tracked publicly on the iCAP Portal online database
- Five-year iCAP update cycle; starting now for iCAP 2020



Facilities & Services

Facilities & Services (F&S) provides all physical plant, operational, and essential services for sustaining an environment that fosters the research, teaching, and public engagement activities at Illinois.

F&S Sustainability Initiatives

- Resilient Grounds and Landscapes
- Transportation Demand Management
- Zero Waste and Recycling
- Renewable Energy
- Energy and Water Conservation
- LEED Certifications
- Green Stormwater Infrastructure
- Sustainability Education and Behavior Change



Pollinator Friendliness

1. Integrated Pest Management (IPM) Program
2. Living Learning Labs
3. Facilities Standards / Green Infrastructure
4. Bee Campus USA designation
5. Solar Farm 2.0 plantings
6. Landscape Master Plan



IPM Program

- **Acceptable pest levels:** Grounds uses no insecticides or fungicides on campus trees, and it is used on shrubs, perennials, annuals, grass, etc. only if the pest has affected the plant to the point it is causing significant harm.
- **Preventive cultural practices:** Grounds replacing Kentucky Bluegrass / Ryegrass mix in favor of a more durable Turf Type Tall Fescue mix in all lawn panels. This shift will allow for more sustainable irrigation practices and lawns that are more resistant against high levels of foot traffic.
- **Monitoring:** The Grounds department is consistently inspecting the different areas of campus; all of the staff are trained and knowledgeable on what to look for and how to identify the presence of pests.
- **Mechanical controls:** F&S utilizes large amounts of green waste wood chips in the planter bed areas of campus to suppress weeds. Application of the wood chips helps to reduce the amount of germination from weed seeds in the soil while also moderating moisture levels.
- **Biological controls:** Planting designs incorporate specific types of flowering plants that attract predator insects, in order to naturally encourage an acceptable predator/pest balance.
- **Pesticide restrictions:** Grounds limits the use of herbicides that contain neonicotinoids



Living Learning Labs

- Red Oak Rain Garden and Vet Med Rain Garden
- Prairies at Florida and Orchard, Orchard Downs, and Vet Med
- Lincoln Avenue Residence Hall
- Tree inventory and diversity analysis
- South Arboretum Woods
- Carbon Gardens



Facilities Standards / Green Infrastructure

- native and sustainable plants lists
- permeable pavements
- bioswales for parking lots and roadways
- increased tree plantings and protection
- green roofs



Solar Farm 2.0

Pollinator Habitat Installation: Within the fenced areas, the Proposer shall establish and maintain a pollinator friendly groundcover beneath the solar arrays, and in all other areas that are not paved for access roads or utility equipment pads. The groundcover shall consist of a seed mix of a minimum of three varieties of a turf type tall fescue, plus dutch white clover (*Trifolium repens*) and lanceleaf self-heal (*Prunella vulgaris* ssp. *Lanceolata*) and creeping thyme (*Thymus serpyllum*). Per 1000 square feet, seeding rate to be 4 lbs of tall fescue mix. Seeding rate for the perennial mix to be about 40 seeds per square foot.

Pollinator Habitat is expected to be mowed during the growing season a minimum of every 4 weeks and a maximum of every 2 weeks, dependent on weather and the needs for taller/invasive weed suppression. If mowing is not suppressing larger or invasive weeds (teasel, thistle, bindweed, etc.), non-selective herbicide may be selectively applied, as to reduce damage to intended plant species. Products shall be submitted for approval prior to use, with a preference for chemicals that do not drift through evaporation, or that infiltrate the groundwater system. Mowing height should be set at no less than 4 inches.



Landscape Master Plan

1. More detailed definition of Campus Master Plan and iCAP guidelines
2. Need for a Shared Vision for Campus Landscapes
3. Review of Service Levels for Grounds maintenance
4. The new Campus Landscapes department within F&S will hire an external landscape architecture firm this coming year

Questions

Brent Lewis

University Landscape Architect

Facilities & Services

University of Illinois at Urbana-Champaign

Email: bcl@illinois.edu

