

# **iCAP WORKING GROUP & SWATeam KICKOFF**

**Dr. Ximing Cai, Morgan White, and Meredith Moore**  
INSTITUTE FOR SUSTAINABILITY, ENERGY, AND ENVIRONMENT



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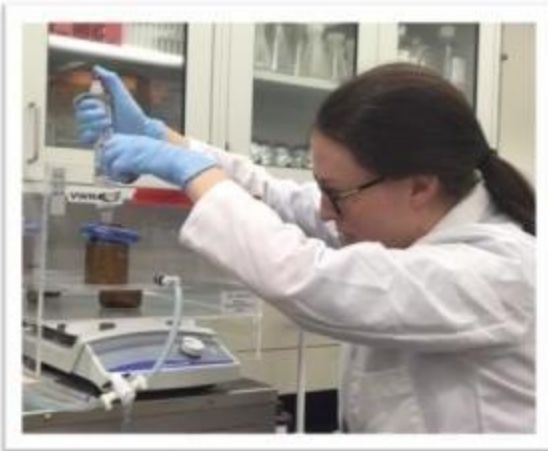
**I ILLINOIS**  
Facilities & Services

# Welcome!

- Introductory Remarks from iSEE
- Overview of iCAP Procedures
- Introductions
- FY19 SWATeam recommendations
- 2015 iCAP status update
- 2020 iCAP drafting plan
- SWATeam representatives
- Reception

# Introductory Remarks

## Institute for Sustainability, Energy, and Environment



**ACTIONABLE RESEARCH**



**CAMPUS SUSTAINABILITY**



**EDUCATION & OUTREACH**

# **Overview of iCAP Procedures**

**Dr. Ximing Cai**

**Institute for Sustainability,  
Energy, and Environment**



# Climate Leadership Commitments

## Signed by University of Illinois at Urbana-Champaign



### 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.



### The Carbon Commitment

Focused on reducing the emissions of harmful greenhouse gases to zero and mitigating campuses' contribution to climate change.

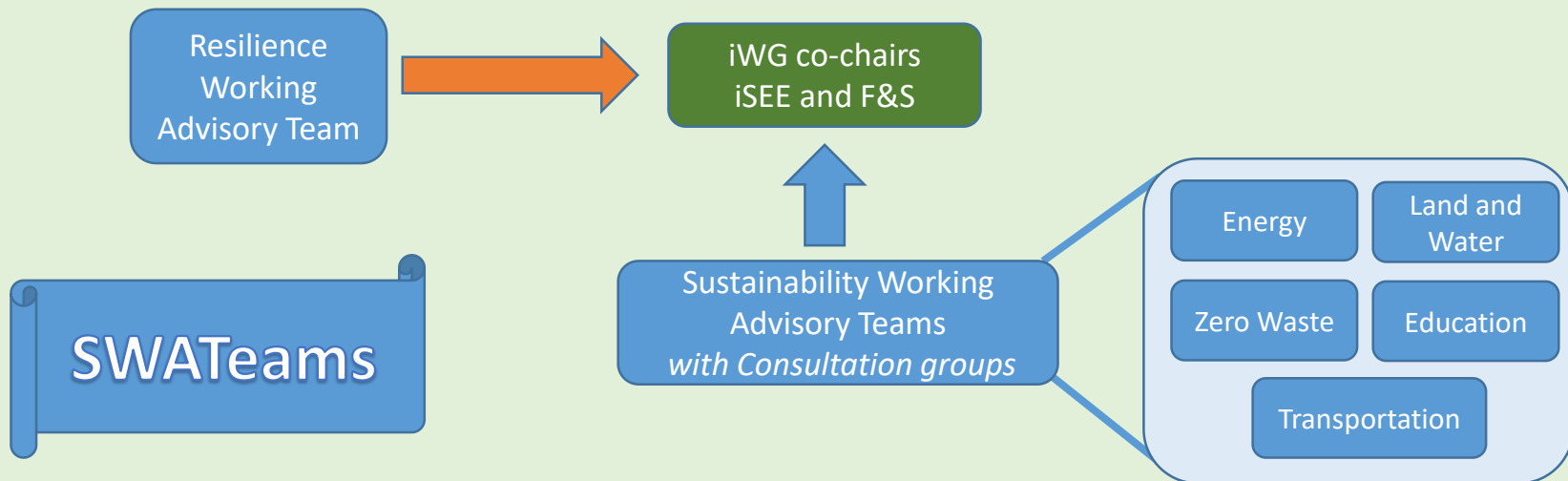


### The Resilience Commitment

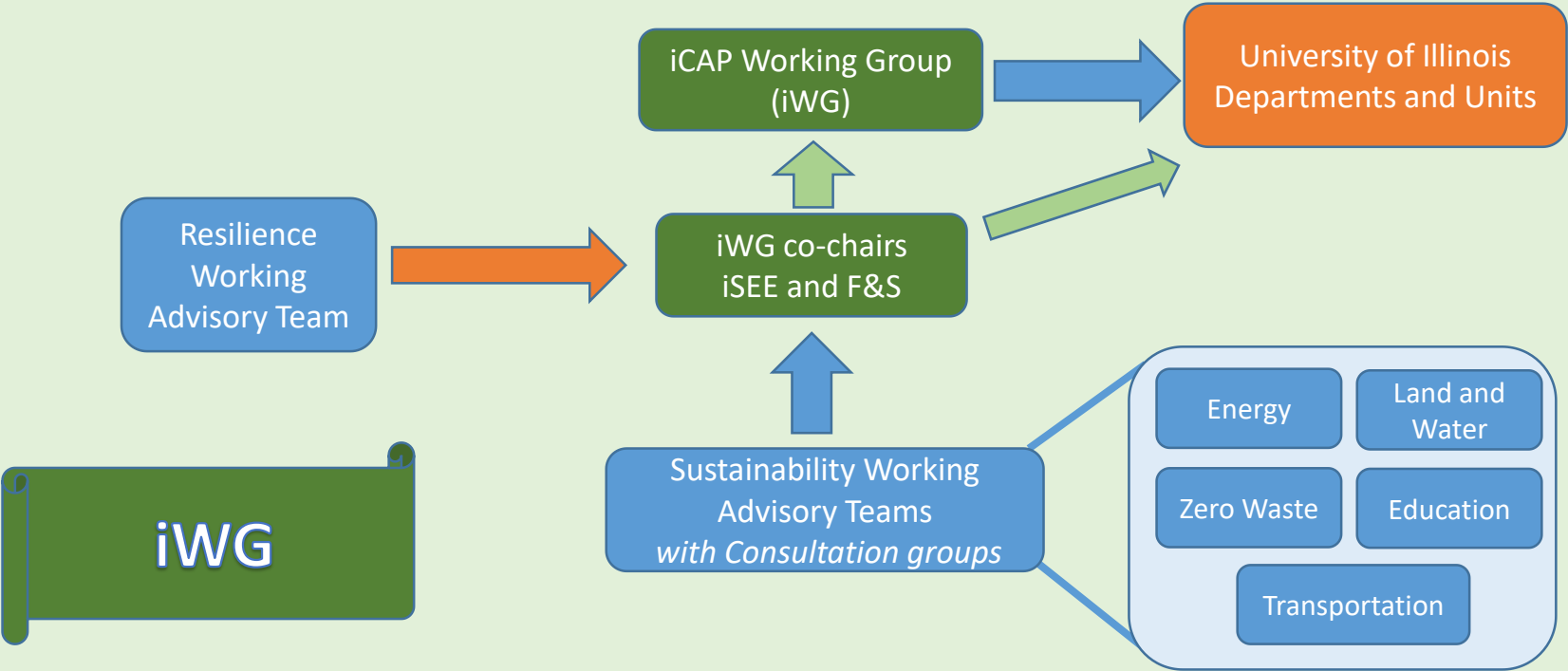
Focused on climate adaptation-specific goals, as well as building community capacity to deal with a constantly changing climate and resulting extremes.

## 2020 iCAP Process

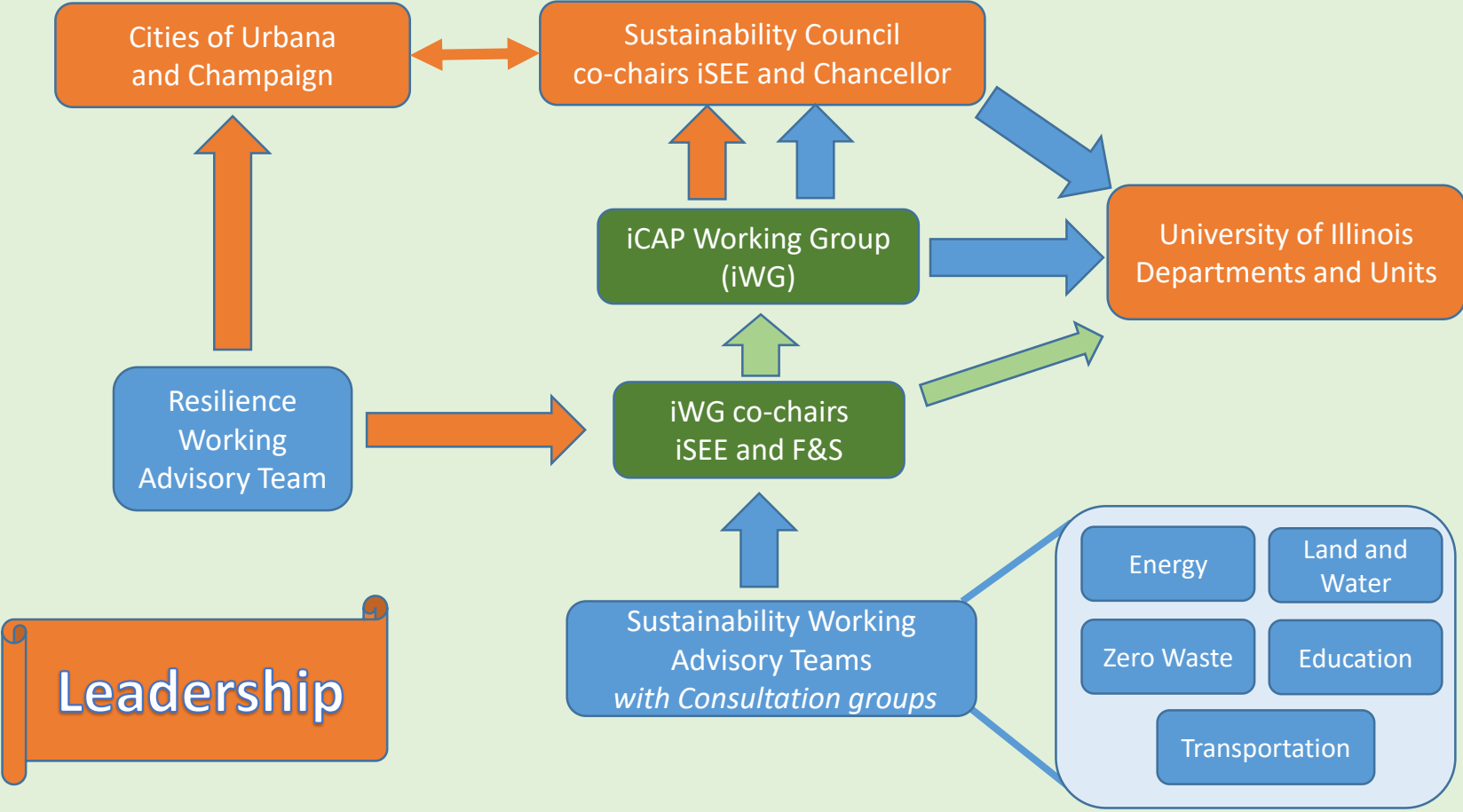
- Sustainability Working Advisory Teams include students, faculty, and staff to represent an intersection of the campus sustainability community.
- The new Resilience SWATeam has several local community leaders included, and reports up to both the cities and the university.



# 2020 iCAP Process

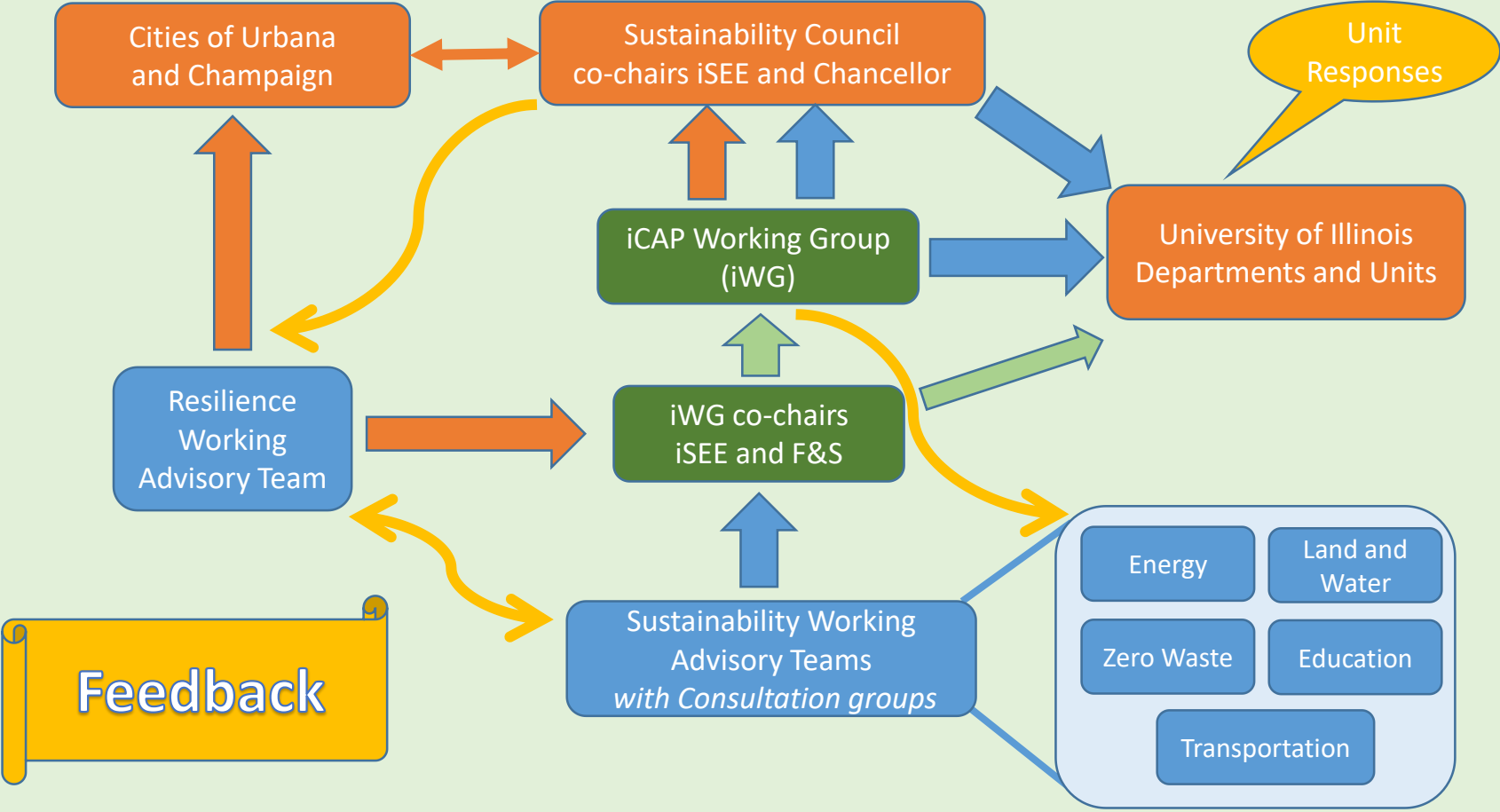


# 2020 iCAP Process

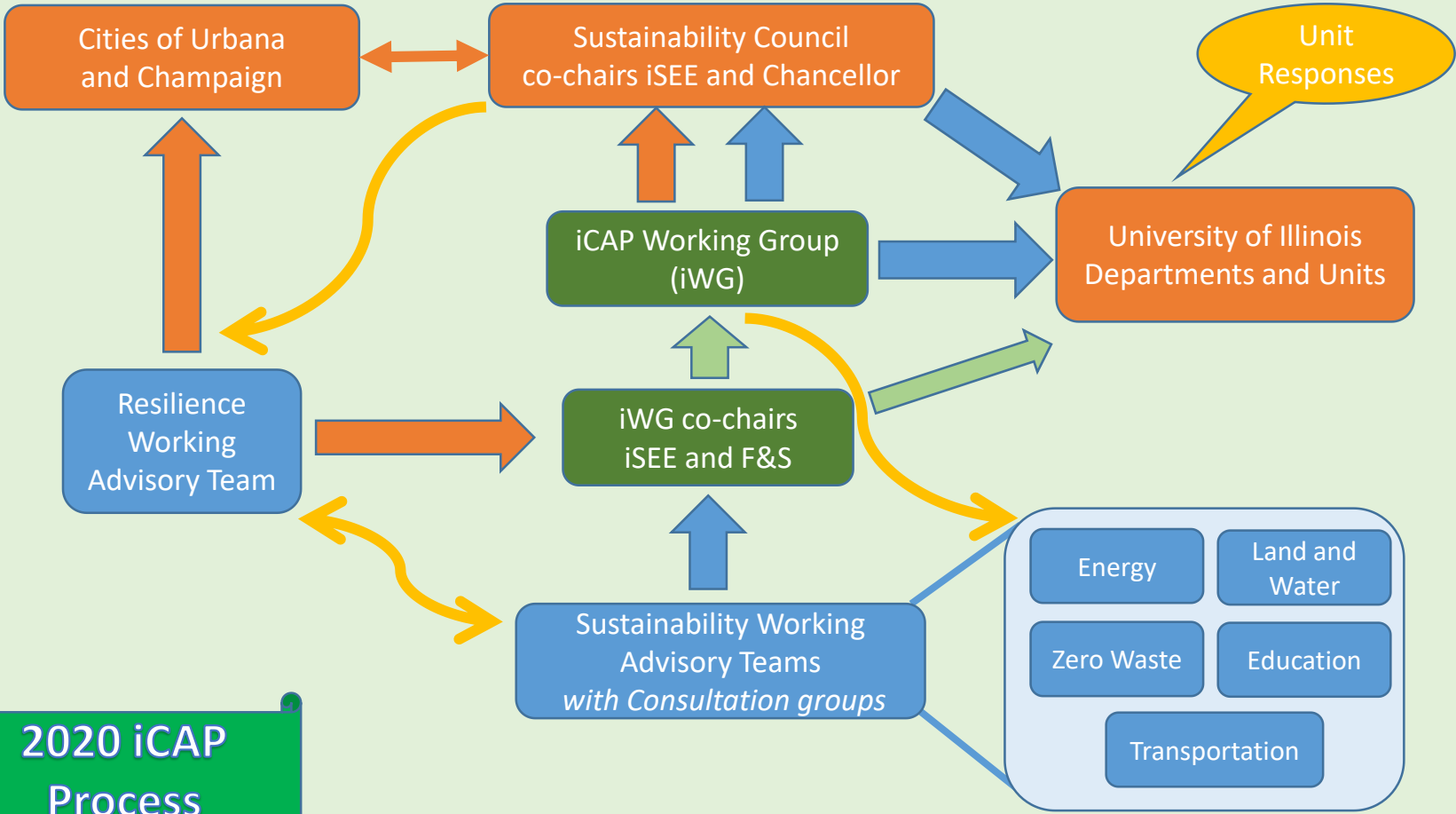




# 2020 iCAP Process



# 2020 iCAP Process



2020 iCAP Process

Initialization

Feedback

Leadership

# Expectations

## For faculty members

- For one faculty member, serving as chair to the team and preside over the meetings
- Guiding the discussions during meetings
- Delegating follow-up steps as needed
- Connecting campus efforts to the larger global knowledge base
- Ensuring faculty leadership in support of campus sustainability goals

# Expectations

## For staff members

- Providing your experience and knowledge of campus procedures and infrastructure
- Providing the team with an understanding of the processes and policies that could impact implementation of recommendations
- Sharing personal knowledge and experience as a professional in relevant fields

# Expectations

## For student members

- Speaking on behalf of the student population as a whole
- Sharing personal excitement and innovative solutions
- Breaking down the walls of tradition to help create meaningful and transformative changes
- Sharing iCAP information with student peers, friends, classmates, and instructors

# Introductions



*Chancellor Robert Jones*

Photo by L. Brian Stauffer

“When the University of Illinois at Urbana-Champaign signed the American College and University Presidents Carbon Commitment in 2008, we began an intentional journey to make our campus one of the most sustainable in America,” Chancellor Robert J. Jones said. “The Climate Leadership Award from Second Nature is welcome recognition of the progress we’ve made in the last decade. On behalf of all the students, faculty members, staff and

administrators who have helped make this possible, we’re honored to accept this award and we are excited to continue to move toward our sustainability goals.”



# **Review of Progress**

FY19 SWATeam recommendations  
2015 iCAP status update

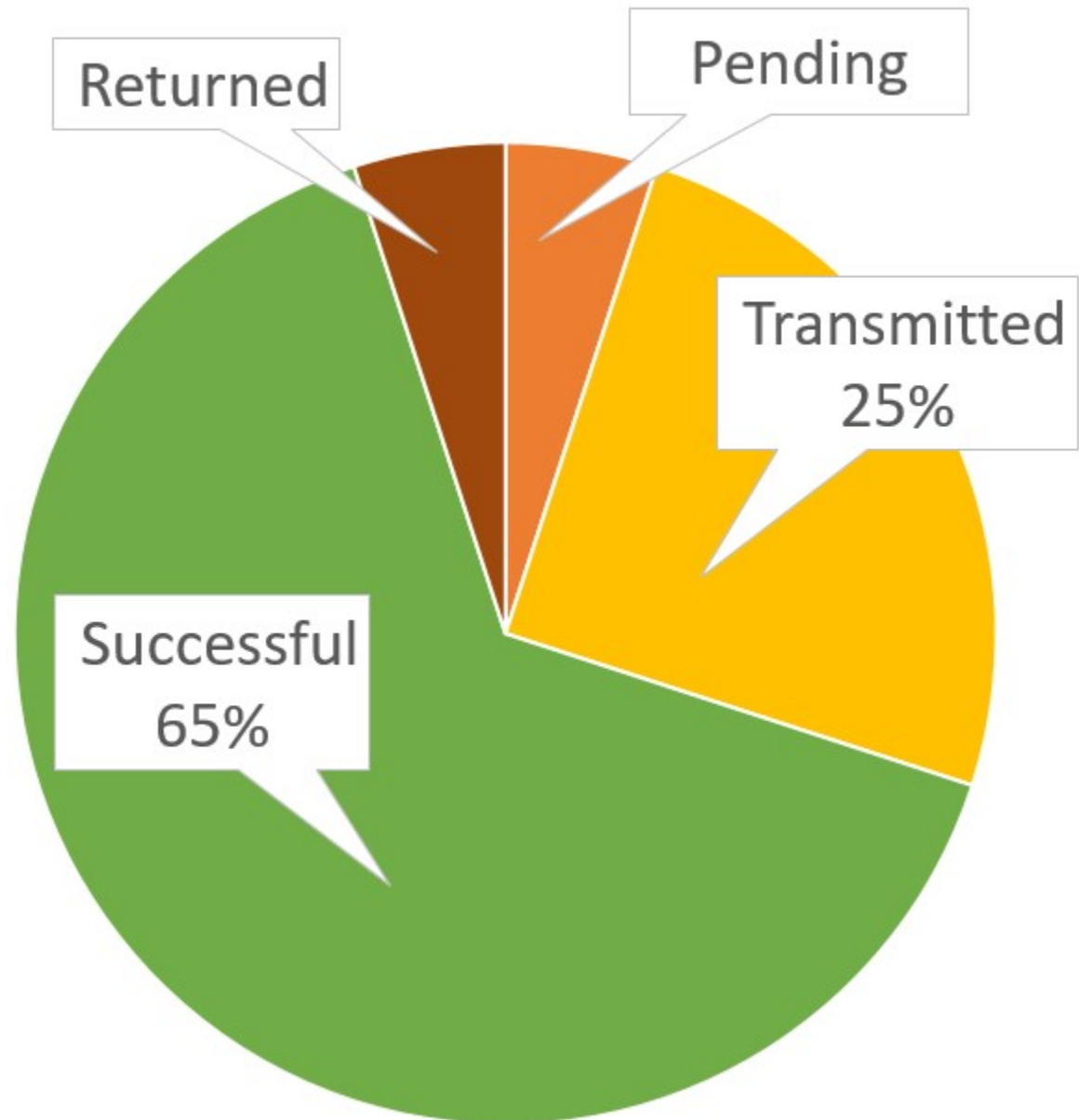
**Ms. Morgan White**

**Facilities & Services**



# FY19 Recommendations Status

Out of 20  
submitted  
to iWIG...





1. [EGen010 Geothermal Feasibility Study](#) - Transmitted to SWATeam
2. [EGen009 Campus Geothermal Policy](#) - Successful, F&S will proceed
3. [Trans011 Carbon Credit Fund](#) - Returned
4. [Trans010 Mode Share Survey](#) - Transmitted to iSEE
5. [Trans009 Parking Advisory Committee](#) - Successful, Parking has implemented
6. [Trans008 Mode Share Survey](#) - Successful, iSEE has implemented
7. [Water007 SeeClickFix](#) - Successful, F&S will proceed
8. [Water006 Lot F23 Monitoring](#) - Transmitted to Parking
9. [Water005 Rainworks Design Lot F4](#) - Successful, Parking will proceed
10. [Water004 GSI Standards Parking Lots](#) - Successful, F&S has implemented
11. [PWR020 F&S Waste Report Endorsement](#) - Successful, iSEE will proceed
12. [PWR019 Sustainable Procurement](#) - Transmitted to Purchasing
13. [PWR018 iBUY Modification](#) - Pending
14. [PWR017 Housing Representative](#) - Successful, Housing has approved
15. [PWR016 Motion Sensor Lighting](#) - Successful, F&S will proceed
16. [PWR015 Lightbulb Replacement](#) - Successful, F&S will proceed
17. [PWR014 Sustainability Ethics Training](#) - Successful, iSEE will proceed
18. [PWR013 Zero Waste Coordinator](#) - Successful, F&S has initiated the search
19. [ALUFS006 Increased Agroforestry](#) - Successful, ACES will proceed
20. [ALUFS005 VetMed Parking](#) - Transmitted to Parking

# SWATeam Successes



114,423

Lights turned off

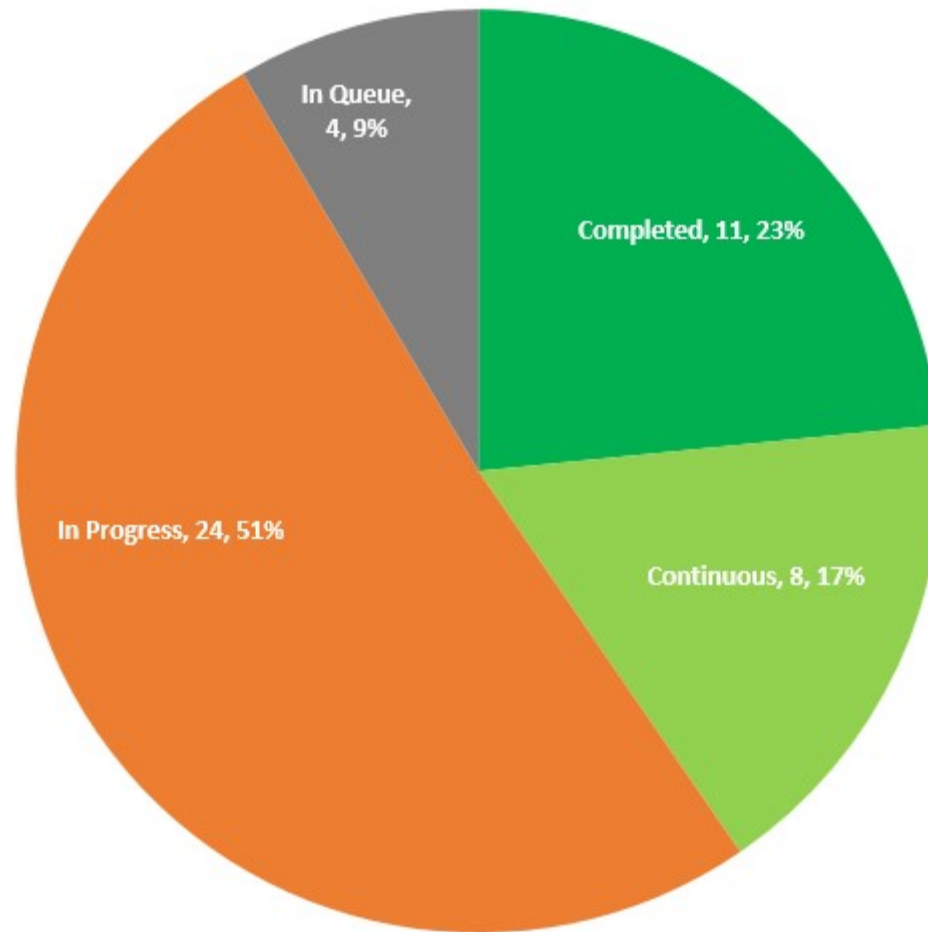
143.6

Tons of carbon dioxide equivalent saved






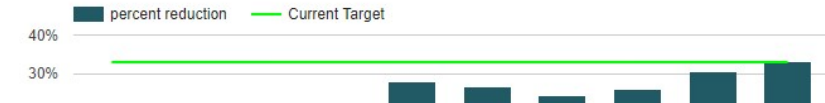
17,163

Dollars saved in energy bills

# iCAP Project Updates



# iCAP Project Updates

THEME	OBJECTIVE	METRIC	PROJECT
	<a href="#">1.0 2015 Illinois Climate Action Plan</a>	<p>▼ Total Campus GHG Emissions</p> <p>Current 2015 iCAP 2010 iCAP</p>  <p>View details for metric: <a href="#">Total Campus GHG Emissions (Tracked by Fiscal Year)</a></p>	<p><a href="#">2015 Illinois Climate Action Plan (2015 iCAP)</a></p> <p>In Progress</p>
	<a href="#">2.1 Net-Zero Space</a>	No metric specified for this objective	<p><a href="#">Maintain or Reduce Gross Square Footage</a></p> <p>Ongoing</p>
	<a href="#">2.2 Improve standards for new building and renovations</a>	No metric specified for this objective	<p><a href="#">Implement Energy Standards</a></p> <p>Ongoing</p>
	<a href="#">2.3 Strengthen Centralized Conservation</a>	<p>▼ Percent Reduction in Energy Use Intensity</p> <p>Current 2015 iCAP 2010 iCAP</p> 	<p><a href="#">Energy Services Conservation Projects</a></p>

<https://icap.sustainability.illinois.edu>



SUSTAINABILITY.ILLINOIS.EDU



# **2020 iCAP Drafting Plan**

**Ms. Meredith Moore**

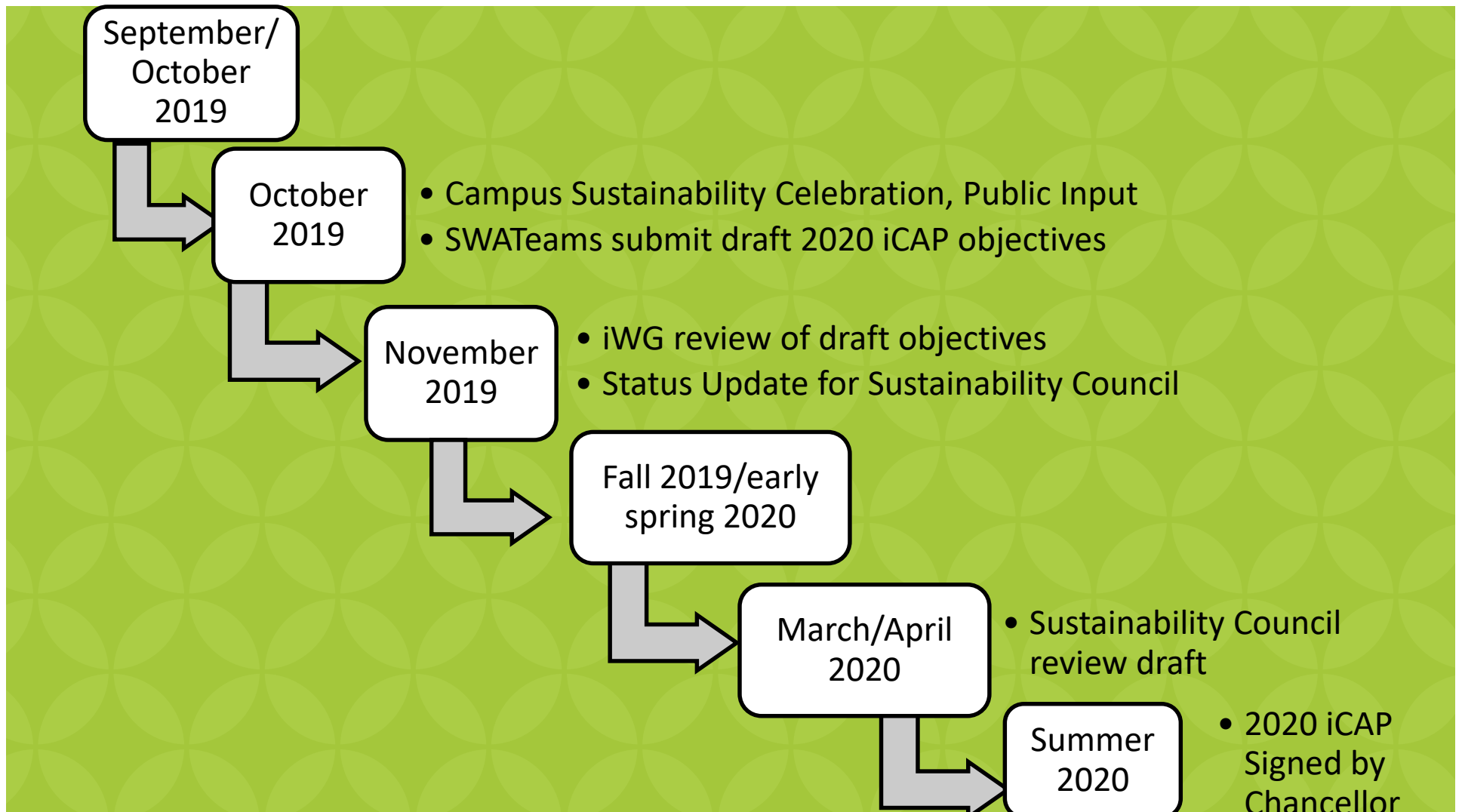
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# 2020 iCAP Timeline



# 2020 iCAP Timeline



# SWATeam Feedback

**Energy**  
**Land and Water**  
**Transportation**  
**Zero Waste**  
**Education**  
**Resilience**





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**Thank you for your contribution to  
campus sustainability!**

**Any questions?**

## 2019-2020 SWATeam Changes

### 2018-2019 Process

- The SWATeam chairs set the agendas and the iWG co-chairs only occasionally attended meetings.
- The teams were able to work on anything they wanted for their topics.
- There were six members on each SWATeam, made up of faculty, staff, and students.
- Some team members helped write sections of the 2015 iCAP chapters.
- Teams were asked to meet about twice a month.
- The SWATeams were Energy Conservation and Building Standards (ECBS), Energy Generation, Purchasing and Distribution (eGen), Water and Stormwater, Transportation, Agriculture, Land Use, Food, and Sequestration (ALUFS), Purchasing, Waste, and Recycling (PWR)



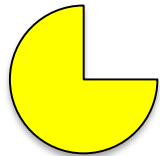
### 2019-2020 NEW Process

- iWG representatives (Ximing Cai, Morgan White, and Meredith Moore) will guide the fall agendas and keep the meetings on schedule for the 2020 iCAP timeline. They will also attend each monthly meeting.
- Efforts need to be focused on developing the 2020 iCAP objectives.
- There are now 9-12 members on each SWATeam, made up of faculty, staff, and students.
- The iWG will be tasked with writing the 2020 iCAP. A 2020 iCAP drafting team will write the chapters.
- We are asking for at least one full SWATeam meeting each month, and they can hold separate additional meetings with people who are available in the other weeks, if desired.
- The 6 new SWATeams correspond to chapters in the 2020 iCAP: Energy, Land & Water, Transportation, Zero Waste, Education, and Resilience

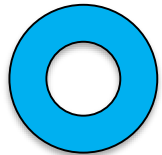
# iCAP Objectives Handout



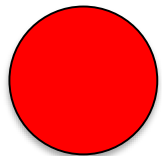
**Completed**



**Actively In Process**

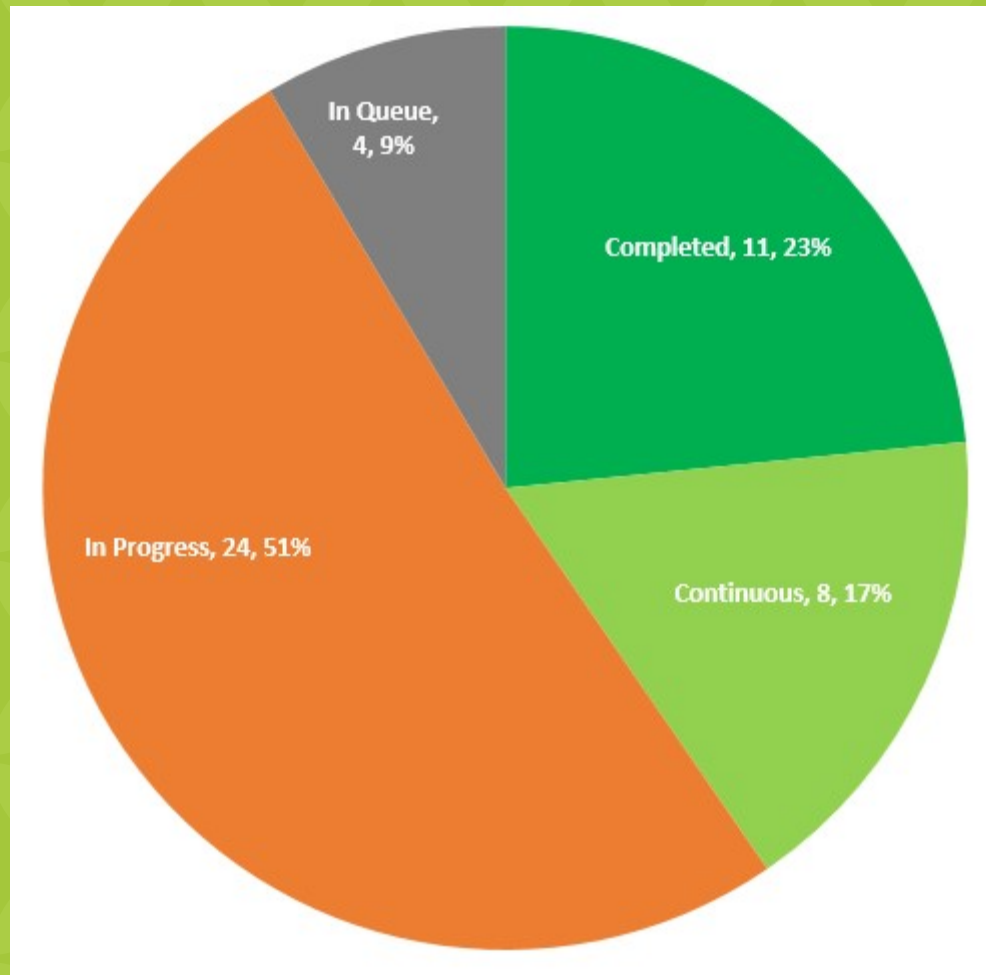


**Needs Continuous Effort**

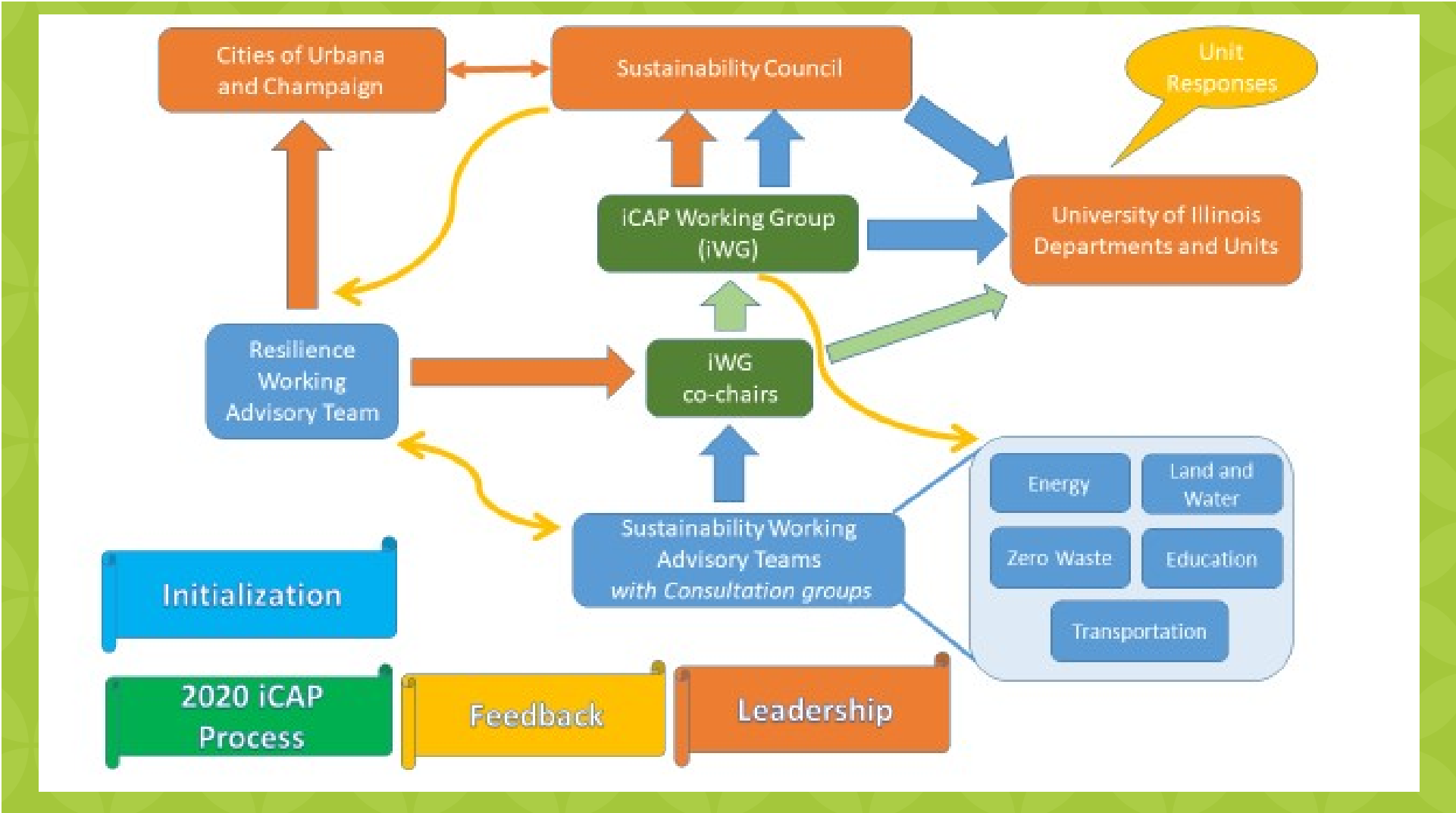


**Pending**





# iCAP Progress, Sep. 5, 2019

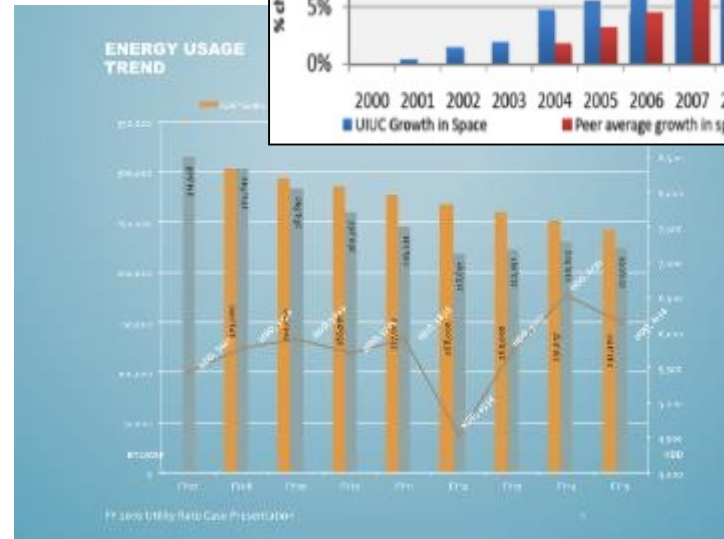
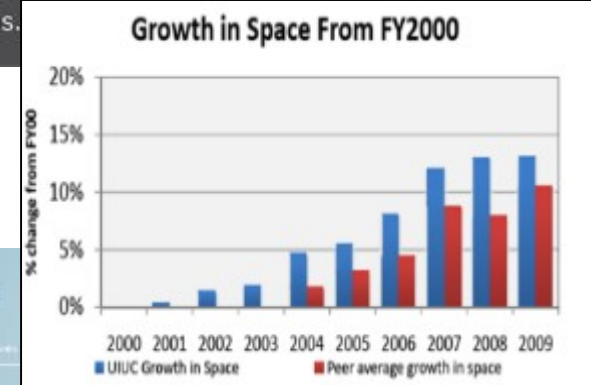
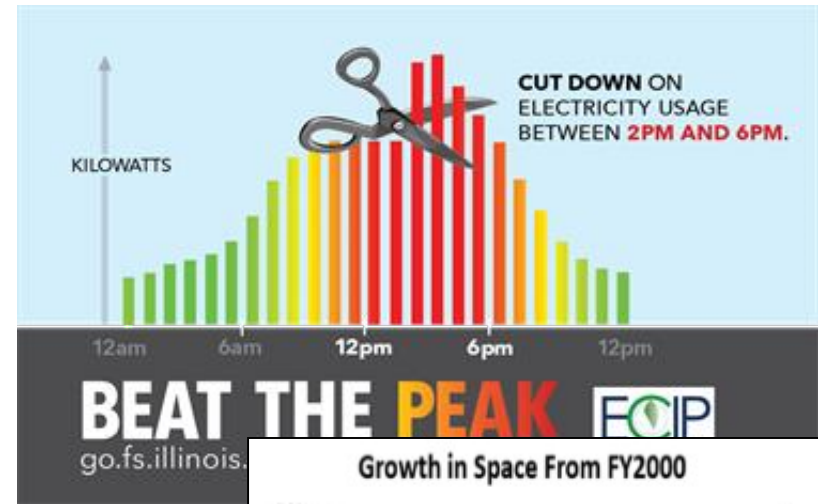


# Campus Sustainability Procedures



# Energy Conservation and Building Standards (ECBS) objectives:

-  1. No New Space
-  2. Highest achievable energy standards
-  3. Strengthen centralized conservation
-  4. Incentivize behavior change





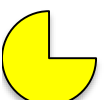
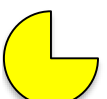


# Energy Generation, Purchasing, and Distribution (eGen) objectives:

- 1. Explore options for 100% clean energy
- 2. 12,500 MWh/yr campus solar by FY20
- 3. 120,000 MWh/yr from low-carbon energy by FY20
- 4. Offset all emissions from Petascale

<https://minisite.alsoenergy.com/Dashboard/2a5669735065572f4a42454b772b714d3d>



# Transportation objectives:

-  1. Reduce air travel emissions 25%
-  2. Reduce fleet emissions 20% by FY20
-  3. Develop scenarios for converting the campus fleet to renewable fuels
-  4. Reduce % of staff driving-alone from 65% to 55% by FY20
-  5. Implement the Campus Bike Plan
-  6. Hire Active Transportation Coord.





# Water and Stormwater objectives:



1. Publicize water use data



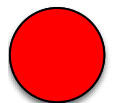
2. Improve cooling tower efficiency



3. Perform a water audit to establish water conservation targets



4. Benchmark landscape performance



5. Implement 4 water re-use projects



6. Investigate and reduce stormwater pollution



Figure 2. Boneyard Creek catchment area (Boneyard Creek is represented by the dashed blue line).

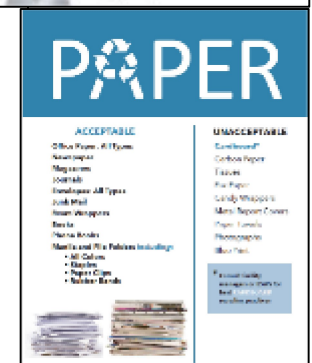
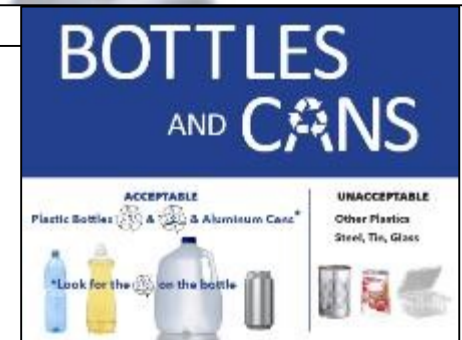


# Purchasing, Waste, and Recycling (PWR) objectives:







1. By FY17, apply environmental standards for purchasing of office paper, cleaning products, computers, other electronics, and freight/package delivery services
2. Reduce waste going to landfills, and increase the diversion rate to 45%
3. Utilize landfills with methane capture
4. Hire a Zero Waste Coordinator



- ACCEPTABLE**
- Office Paper: All Types
  - Newspaper
  - Magazines
  - Journals
  - Envelopes: All Types
  - Junk Mail
  - Ream Wrappers
  - Books
  - Phone Books
  - Manila and File Folders *including:*
    - All Colors
    - Staples
    - Paper Clips
    - Rubber Bands



# Agriculture, Land Use, Food, and Sequestration (ALUFS) objectives:

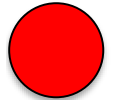
-  1. Assess and reduce emissions from agricultural operations
-  2. Sustainable landscape planning with a tree care plan and an integrated pest management program by FY17
-  3. Integrate iCAP in Campus Master Plan
-  4. Increase local food procurement in Dining Halls from 28% to 40% by FY25
-  5. Convert 50 acres to agroforestry
-  6. Reduce nitrates in agricultural runoff and subsurface drainage by 50%



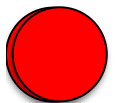
## Carbon Offset objectives:



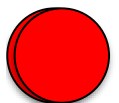
1. RFP for purchasing verified carbon offsets



2. By the end of FY17, enable campus units to voluntarily purchase carbon offsets



3. By the end of FY18, develop a program of local or regional mission-linked verified offsets

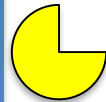


4. In FY20, utilize carbon offsets to meet all unmet iCAP emission targets

## Funding objectives:



1. Develop criteria for allocating funds



2. Increase the Revolving Loan Fund to level with peers






3. Identify funds available for non-payback projects and options to increase that amount annually






4. Evaluate the feasibility of internally putting a price on carbon emissions



## Education objectives:




-  1. Undergraduate Minor
-  2. Offer opportunities for undergraduate students to obtain research and practical experience by participating in independent study projects on topics in sustainability.
-  3. Add at least five new sustainability-focused courses by FY20.

## Outreach objectives:

-  1. Support student sustainability programs
-  2. Strengthen and communicate about sustainability outreach programs. By FY20, 50% of units participating in the Certified Green Office Program
-  3. Annually host three major sustainability events: Earth Week, Campus Sustainability Week, and the iSEE Congress



## Research objectives:

-  1. Create a hub for the sustainability community: to develop a comprehensive online gateway for faculty, staff, students, potential donors, and all interested parties to find information about sustainability research, education, outreach, initiatives, and operations.
-  2. Build connections: to bring together scholars from across campus to encourage collaboration, and to enhance research endeavors.
-  3. Foster “actionable” research: to encourage and support research that provides real-world solutions to society’s grand challenges in sustainability.

