

Sustainability Council Spring 2023

May 10, 2023

iSEE

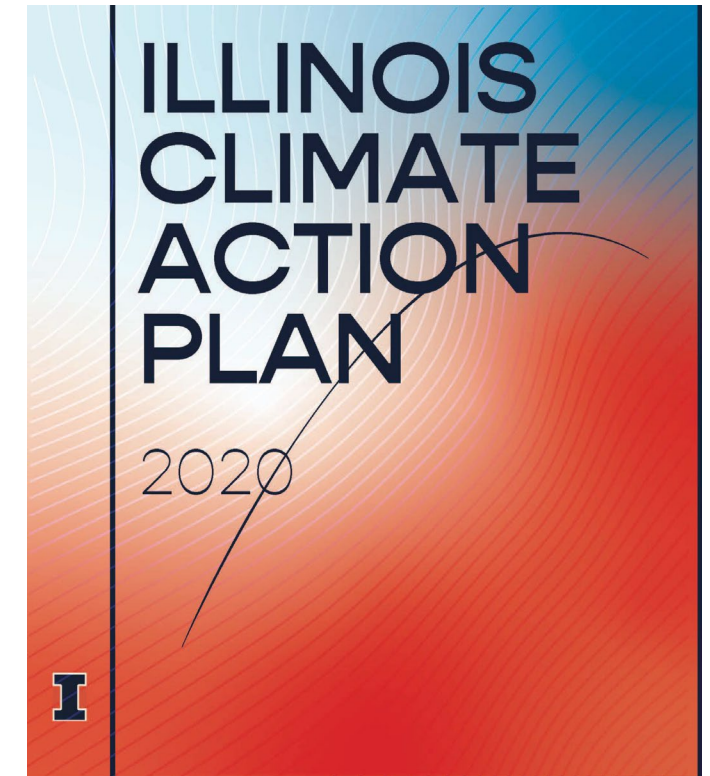
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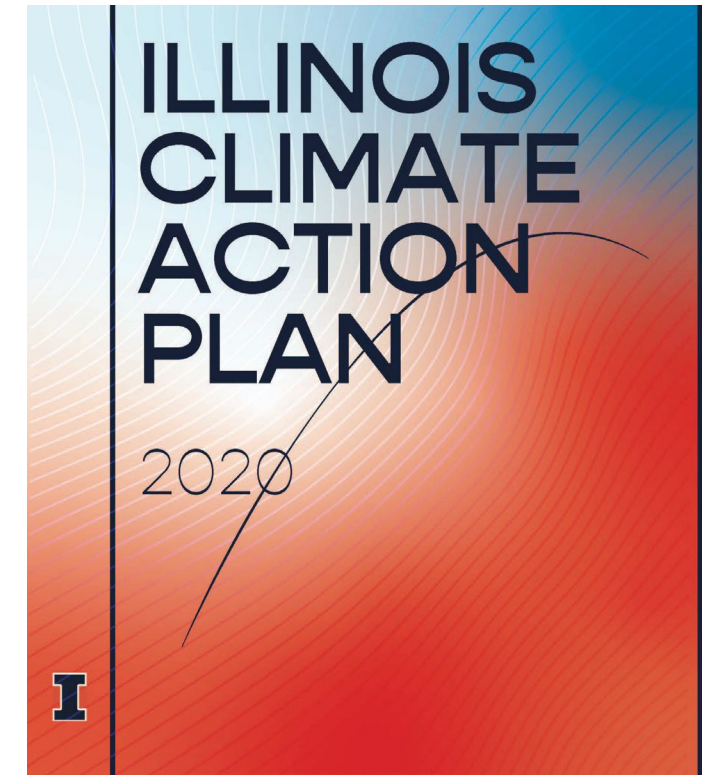
Members of Council

- **Chair:** Robert J. Jones, Chancellor, University of Illinois at Urbana-Champaign
- **Vice Chair:** Madhu Khanna, Director of iSEE
- William Bernhard, Interim Vice Chancellor for Academic Affairs and Provost
- Barry Benson, Vice Chancellor for Advancement; Illinois Foundation Senior Vice President
- Danita Brown Young, Vice Chancellor for Student Affairs
- Susan Martinis, Vice Chancellor for Research and Innovation
- Brian Bundren, Interim Asst. Provost for Capital Planning
- Mike DeLorenzo, Vice Chancellor for Administration and Operations
- Tim Knox, Assistant Athletic Director



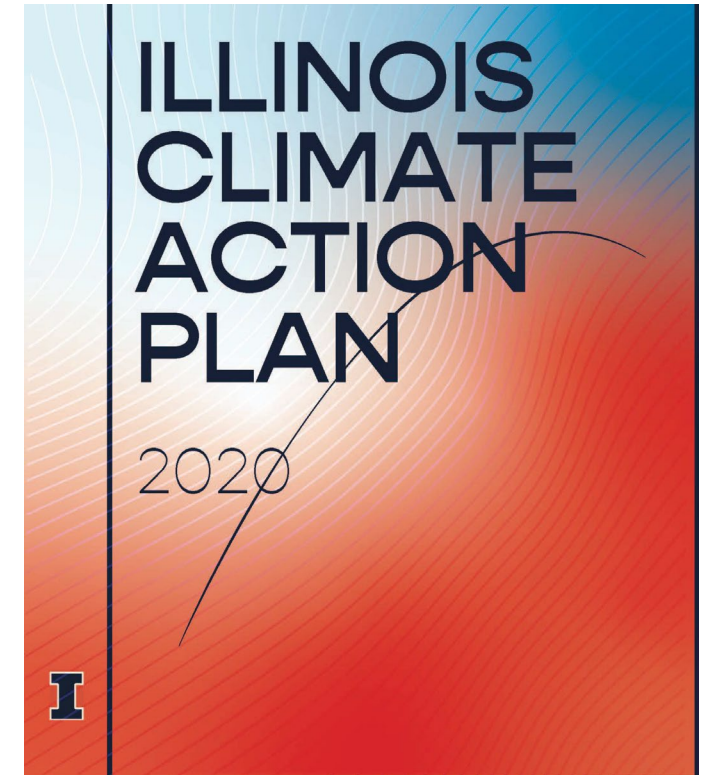
Members of Council

- Lowa Mwilambwe, Associate Vice Chancellor for Auxiliary, Health & Well-Being
- Rashid Bashir, Dean, College of Engineering
- German Bollero, Dean, College of Agricultural, Consumer, and Environmental Sciences
- Chrystalla Mouza, Dean, College of Education
- Venetria Patton, Dean, College of Liberal Arts & Sciences
- Ehab Kamarah, Associate Vice Chancellor and Executive Director, Facilities & Services
- Jeffrey Eric Jenkins, Chair, Senate Executive Committee
- Garrett Forrest, President, Illinois Student Government (ISG)
- Jack Reicherts, Chair, Student Sustainability Committee (SSC)
- Owen Jennings, Co-Chair, Student Sustainability Leadership Council (SSLC)



Non-voting members and invited guests

- Luis Rodriguez, iSEE Associate Director for Education and Outreach
- Eric Green, iSEE Senior Academic Advisor & Instructor
- Elizabeth Murphy, iSEE Managing Director
- Jennifer Fraterrigo, iSEE Associate Director for Campus Sustainability
- Morgan White, Facilities & Services Associate Director for Campus Sustainability
- Geri Melchiorre, Senior Director of Investments
- Anita Million, Associate Director, Agricultural Property Services

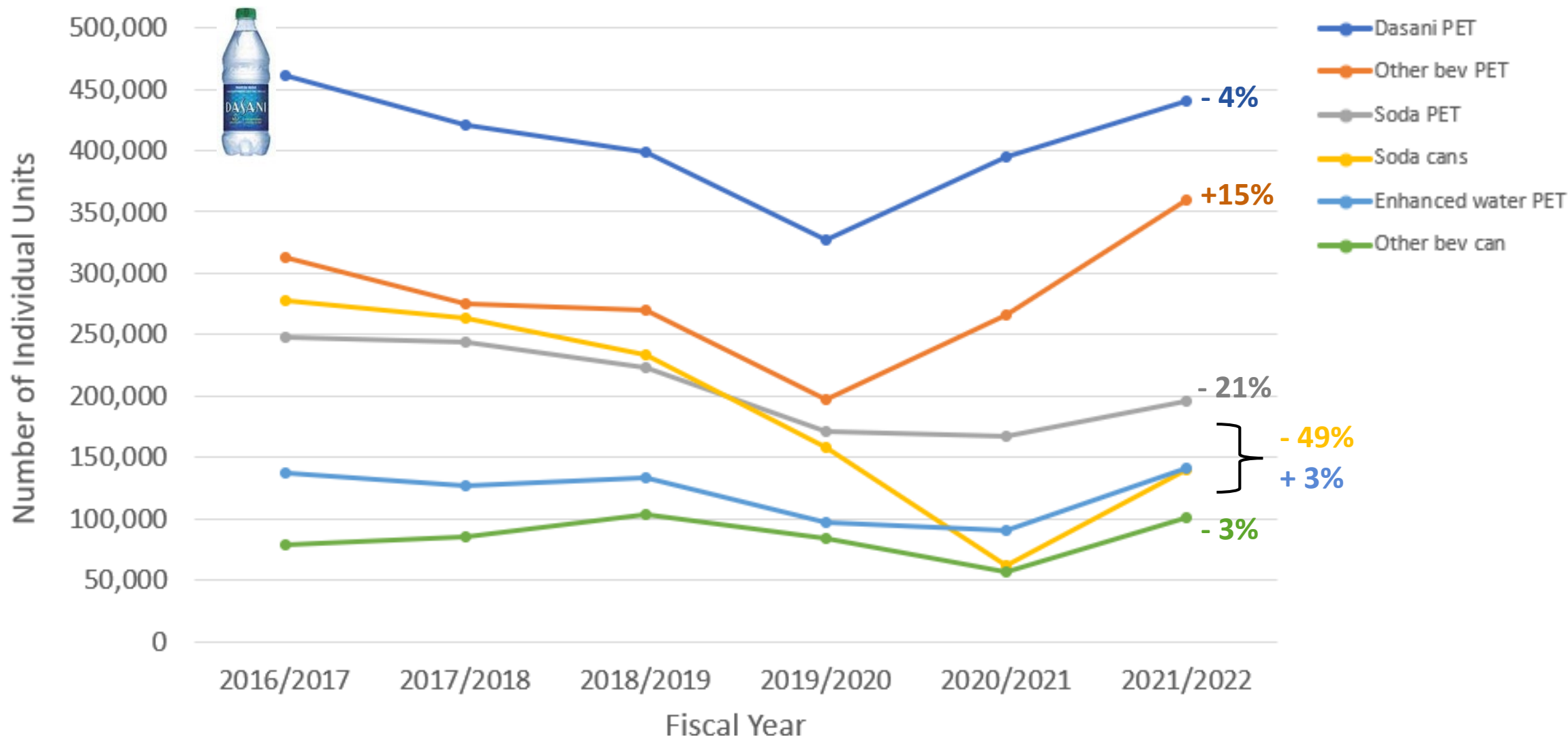


Agenda

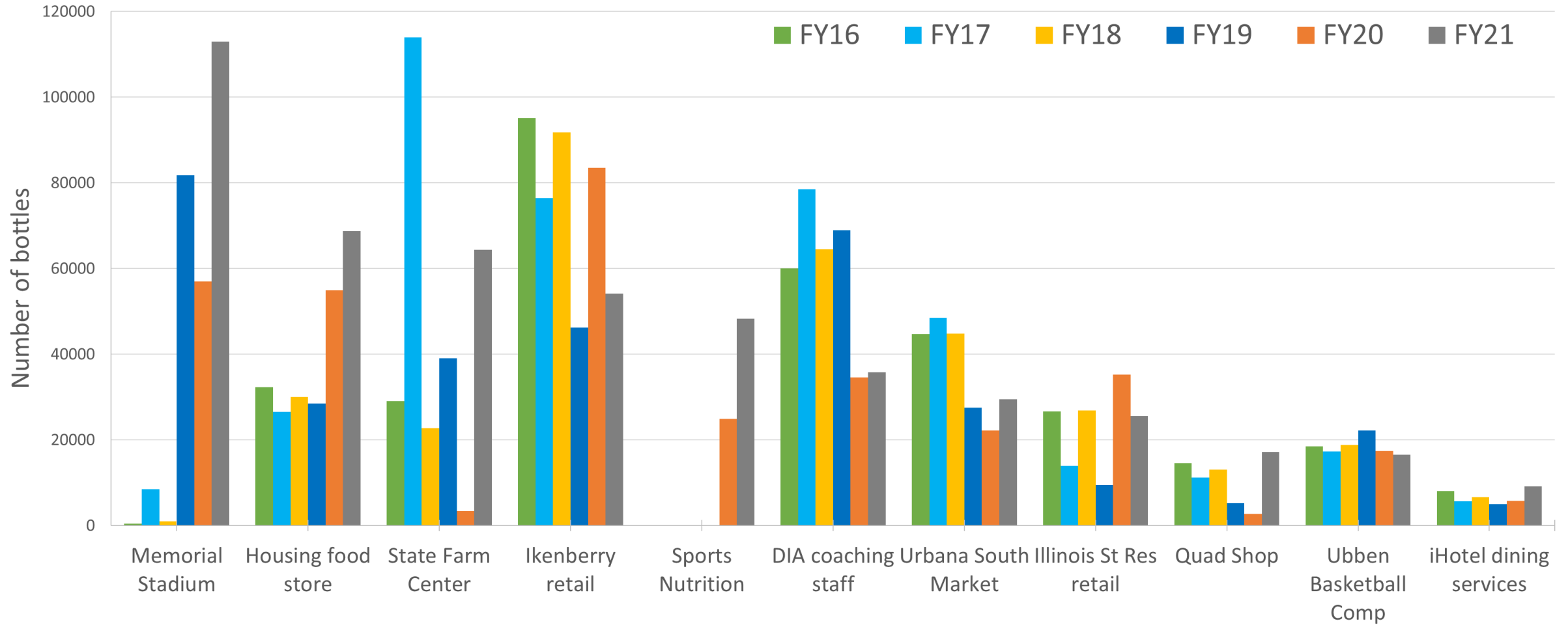
- Zero Waste
- Energy Planning
 - Clean energy goals
 - Use of University-owned land for renewable energy development
- Green Research Committee
- Update on Sustainability General Education requirement
- White House Forum on Campus and Community-Scale Climate Change Solutions
 - Key ideas
 - Building capacity in the workforce
- Student Updates



Plastic water bottles are a primary contributor to plastic waste



Bottled water patterns driven by athletics and dining retail



Plastic Waste Reduction Challenge for Athletics

- Recycling infrastructure
- Culture change – internally (staff) and externally (spectators)
 - Communicate goals
 - Clarify policies
- Water access – filler station inventory incomplete



Diversion increases with improved infrastructure, messaging

- March 2 – second Zero Waste basketball game
 - Diversion rate = 28% (vs. 11% in Feb)
 - Aluminum = 340 lbs
 - Plastic = 500 lbs
 - Mixed materials = 440 lbs
- Increase a result of many volunteers(+100), better messaging
 - most recycling collected from “bowl” (not placed in bins)
- New tailgate recycling program likely to present similar challenges



Culture Change via Policy Clarification



Access to filler stations

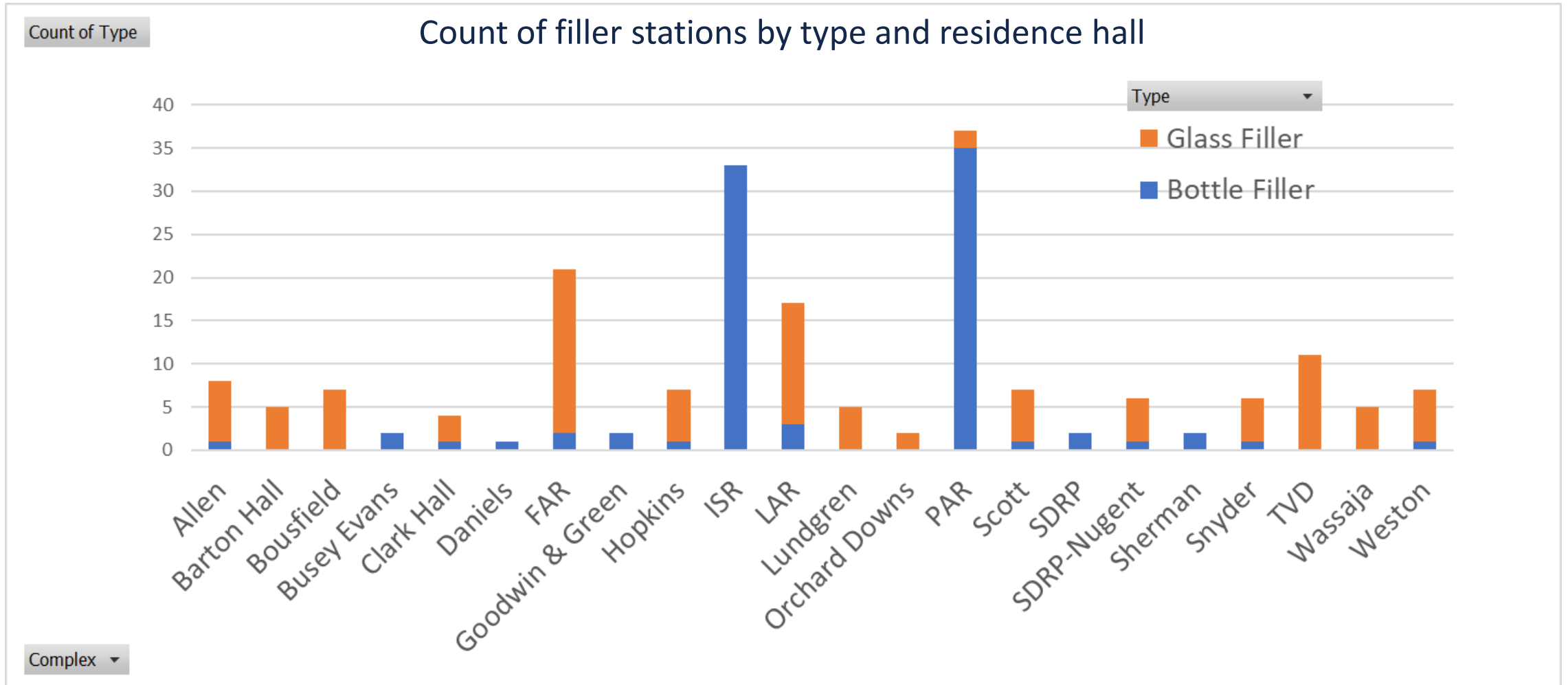
- Memorial Stadium has 0 bottle fillers currently, and will be adding two over the summer
- State Farm Center has 5 bottle fillers on floors 2 and 3, not near concessions
- Unknown what infrastructure is available at other facilities, for coaching staff
- F & S Zero Waste Team will be inventorying other facilities over the summer



Plastic Waste Reduction Challenge for Housing

- Revenue from sales of bottled beverages
- Good recycling infrastructure and access to glass fillers
- Beliefs
 - Water from glass filler (spigot) station is of poor quality
 - Impact of plastic waste is small
 - Limited access to refill a reusable water bottle
- Lack of bottle filler stations in residence halls

Most residence halls have glass filler stations with spigot



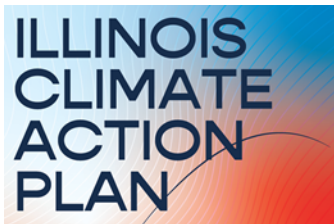
Beliefs about drinking water

- Drinking Water Survey (ZW005)
 - 73% first-year students indicate they prefer filtered water
 - 83% first-year students believe filtered water is safer than tap
 - >50% of all students believe bottled water is safer than tap vs 29% of staff and 18% of faculty
 - 37% first-year and 51% second-year students indicate that bottled water is their primary source of drinkable water
 - 43% of first-year students believe one single-use bottle does not yield a significant environmental impact
 - 56% of first-year and 57% of second-year students believe there are not enough convenient places to refill a reusable water bottle on campus



Discussion and Next Steps

- Continue with ZW efforts at athletic events, focusing on changing the culture through communication and clarifying policy
- Increase recycling bins and bottle filler station availability at athletic facilities
- Given belief that water from spigots is of poor quality
 - Increase bottle filler station availability in residence halls
 - Educational campaign targeting underclassmen (residence halls, welcome week) and focusing on water quality, environmental impacts of single-use plastics, and access



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Facilities & Services
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Discussions underway about Solar Farm 3.0



Solar Farm 1.0	+ ~5,000 MWh/yr
Solar Farm 2.0	+ ~20,000 MWh/yr
Wind PPA (Lincoln, IL)	+ ~25,000
<u>Solar Farm 3.0 (proposed)</u>	<u>+ 90,000</u>
<u>MWh/yr</u>	
iCAP goal	= 140,000 MWh/yr



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Use of University-Owned Land for Renewable Energy Development

May 2023

Sustainability Council Meeting

AGRICULTURAL PROPERTY SERVICES OFFICE

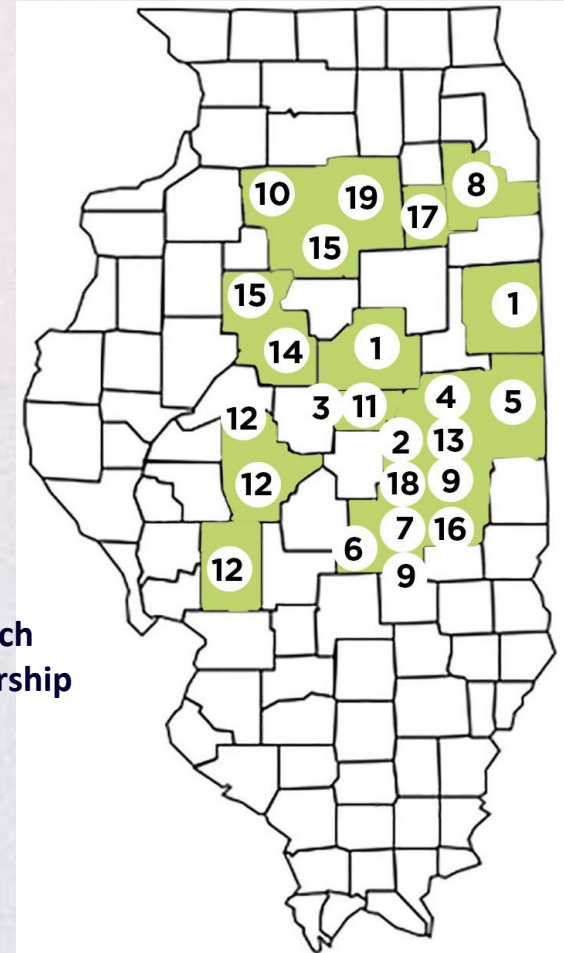
ROLE AND RESPONSIBILITIES

- Fiduciary for Endowment Farm Beneficiaries on behalf of Board of Trustees
- Acts in Farm Management capacity for all farms
 - Select farm operators via RFI evaluations
 - Establish leases and rent terms in consultation with Farm Advisory Committee
 - Primary contact for farm operators and stakeholders
 - Manage improvement projects and repairs
 - Coordinate accounting, cash reserves, PILOT, and other transactional requirements

UI FARMS UNDER APS MANAGEMENT

- 20 Endowment Farms (38 units)
- 7 Non-Endowment Farms (14 units)
- 13,400 acres
- 5 Crop Share leases
- 47 Cash Rent leases
- 24 Illinois Counties
- Over \$500k PILOT

1. Addington
2. Allerton
3. Campbell
4. Carman
5. Carter-Pennell
6. Curl
7. DeHart
8. Grohne
9. Hackett
10. Herbolsheimer
11. Hubbell
12. Hunter Agricultural Research
13. Hunter Agricultural Scholarship
14. O'Connell-Phillips
15. Spillman
16. Voigt-Freeman
17. Waffle
18. Warren
19. Weber



SUSTAINABILITY ON OUR FARMS TODAY

- McLean County Farm has 2 wind turbines
- DeWitt County Farm under agreement for wind project
- Piatt County Farm is leased for hard wood trees
- Macon, Piatt and Sangamon County Farms – water quality studies
- Sangamon County Farm utilizes solar power to operate grain dryer
- USDA-FSA pollinator program and the conservation reserve programs

RENEWABLE ENERGY PROJECTS ON UNIVERSITY-OWNED LAND

Benefits

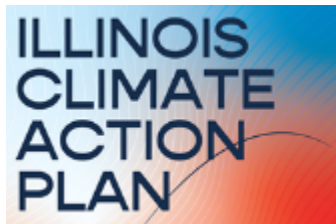
- Alignment with System guiding principles
- Tangible reduction in net carbon emissions
- Potentially increase income for farms
- Eliminate need to acquire land

Considerations

- Sensitivity of agricultural community to University actions with farms and local community perception
- Opportunity cost and uncertainty associated with the future
- Impact to farm and operator (*i.e.*, long-term value, soil compaction, tile damage, disruption to operations, maintenance)
- Donor intention

Green Research Committee

- Co-chaired by Stephanie Hess (DRS) and Jeremy Neighbors (F&S)
- Charge letter sent to committee March 22. Three goals:
 - 1) Identify specific goals and aspirations, where adoption of alterations at research sites and their activities has potential to safely and practically contribute to climate resiliency
 - 2) Develop a program whereby individual research groups and Departments may qualify for “Green Lab” and/or “Green Research” Certification by adopting best practices that maintain the safety of the research group and community.
 - 3) Outline a framework to recommend building-specific plans for safe energy conservation in our research spaces that include interdisciplinary research institutes, academic colleges, and field sites.
- Initial recommendations by May 1
- Preliminary report by October 1
- Final report by November 15



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Facilities & Services
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Update on Sustainability General Education requirement

Luis Rodriguez, iSEE Associate Director for Education and Outreach

Eric Green, iSEE Senior Academic Program Instructor

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Sustainability General Education Option

Review

Proposal: Create a 3 credit-hour gen-ed category within Natural Sciences and Technology for a course in sustainability and environmental topics

- Will be an option for all undergraduate students to fulfill their Natural Science and Technology credit hours
- Initially passed as an Illinois Student Government resolution
- iSEE has been supporting student efforts to get this approved



Sustainability General Education Option Update

A proposal was submitted for review to the college Associate Deans for Academic Programs. The below feedback was given and will be incorporated into an updated proposal:

- This option should not be limited to the Natural Sciences and Technology category and should be expanded to have an option within Social and Behavioral Sciences category.
- There is a small number of courses that would be added to the Gen. Ed. list. This may not be an issue since this is only an option and not a separate requirement.
- Contact departments where courses were identified and determine if there is support from the unit's head to include those courses as fulfilling the general education requirement.
- Identify if there are expected shifts between which classes are taken and how that may impact colleges.



Alternative General Education Requirement

- Idea to create a sustainability requirement from department head
 - Recommended following cultural studies requirements
 - Requirement could be fulfilled by completing a course with designation, potentially without credit hour restrictions
- Analysis to include:
 - Existing number of sustainability courses with respect to total number of classes
 - Number of departments and degree programs represented in list of existing courses
 - Percentage of students that are currently taking these courses and what those courses' capacity are
 - Impact on number of credit hours students will need to take



Sustainability General Education Option

Next Steps

- Host open houses for Department Heads for feedback on proposals
- Determine preferred proposal & resubmit proposal to college Deans
- Submit to Gen-Ed Board for review
- Pass proposal through UC Senate committees
 - Educational Policy
 - Campus Operations
 - Senate Executive Committee
- Invite supporters and contributors to speak on behalf of proposal during discussion
- Introduce final proposal to Senate floor



White House Forum on Campus and Community-Scale Climate Change Solutions

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The role of higher education in catalyzing climate solutions: key ideas

- Campuses as incubators for climate solutions, innovation
 - Proving grounds for new climate solutions
 - Demonstrate pathways to net-zero
 - Scaling and transferability – local to global
- Partnering with communities and other stakeholders (public and private) to deliver climate solutions
 - Focus on DEIJ, stable funding critical
 - Increasing federal funding
- Preparing students for new career opportunities in sustainability



The role of higher education in building capacity for sustainability in the workforce

- Integrate sustainability into traditional fields to address emerging workforce demand
 - Green Athletics, Green Medical and Health Sciences; e.g., Carle Health hiring Sustainability and Energy Project Manager, Waste Management Sustainable Sports Program
- Partnering with non-R1s to increase access and opportunities
- Campus as a living lab for training and workforce development programs, e.g., Station1 model at MIT



Student Updates

Jack Reicherts, Student Sustainability Committee

Owen Jennings, Student Sustainability Leadership Council

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Student Sustainability Committee

Successfully pursued both fee increases! (\$2 >> \$3; \$12.05 >> \$15.00)

Hired a new staff member, Codie Sterner, to provide a dedicated focus on both event programming and administering the Illinois Green Fund.

- Hiring for our second staff member and two student interns is underway

Funded ≈\$1.6 million in student-, staff-, and faculty-led sustainability projects including:

- Ecofeminism Summit(s)
- EV Charging Stations
- Rainwater Management Plan
- ...and more! (25+ in total)



Student Sustainability Leadership Council

Successfully hosted our second “earth week” event, in collaboration with iSEE and the SSC.

- Green Quad day; 50+ student organizations represented
- Tuesday Talks resumed at Bevier café featuring voices from on campus and beyond

Hosted the Green Globes, a sustainability focused awards ceremony.

Maintained regular monthly general meetings with representatives from our constituent organizations.

- 15-20 organizations and RSOs consistently represented

Hosted the semester’s largest on-campus environmentally focused career panel, in collaboration with the SSC.

- Over 120 student attendees



Thank you



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