

WELCOME

Campus Sustainability Celebration!

October 20, 2021



ILLINOIS
CLIMATE
ACTION
PLAN



Institute for Sustainability,
Energy, and Environment
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

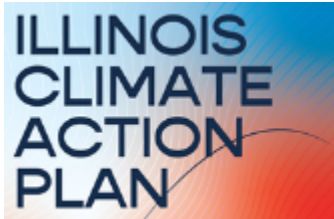


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Dr. Ximing Cai
*iSEE Associate Director of
Campus Sustainability*



Morgan White
*F&S Associate Director for
Sustainability*



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University of Illinois Urbana-Champaign Land Acknowledgement



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Madhu Khanna, *Interim Director of iSEE*



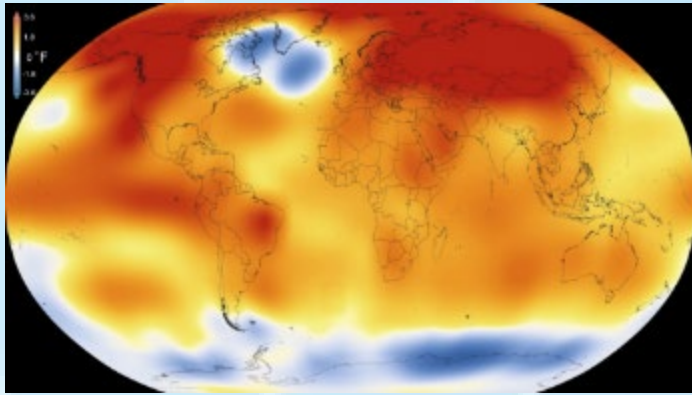
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The Institute for Sustainability, Energy, and Environment (iSEE):

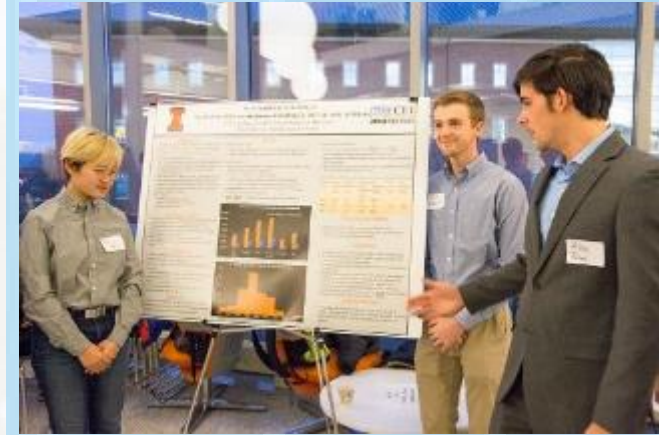
actionable research, campus sustainability, education & outreach
sustainability.illinois.edu



Actionable research

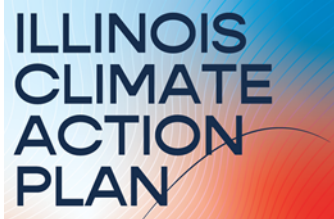


Campus sustainability



Education & outreach

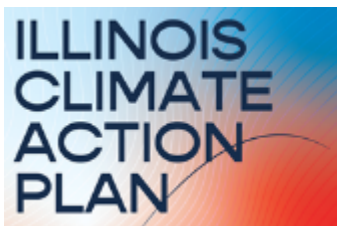
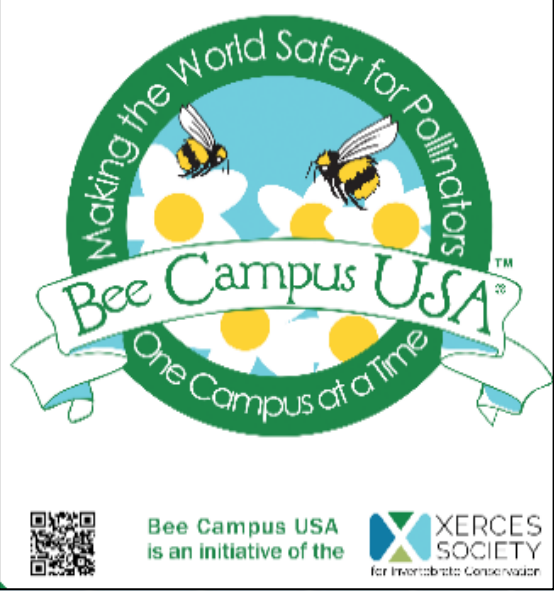
The overarching goal: *To become a global model of sustainability by creating effective, positive change. Also, to become the “front porch” for all sorts of sustainability resources for campus and community members.*



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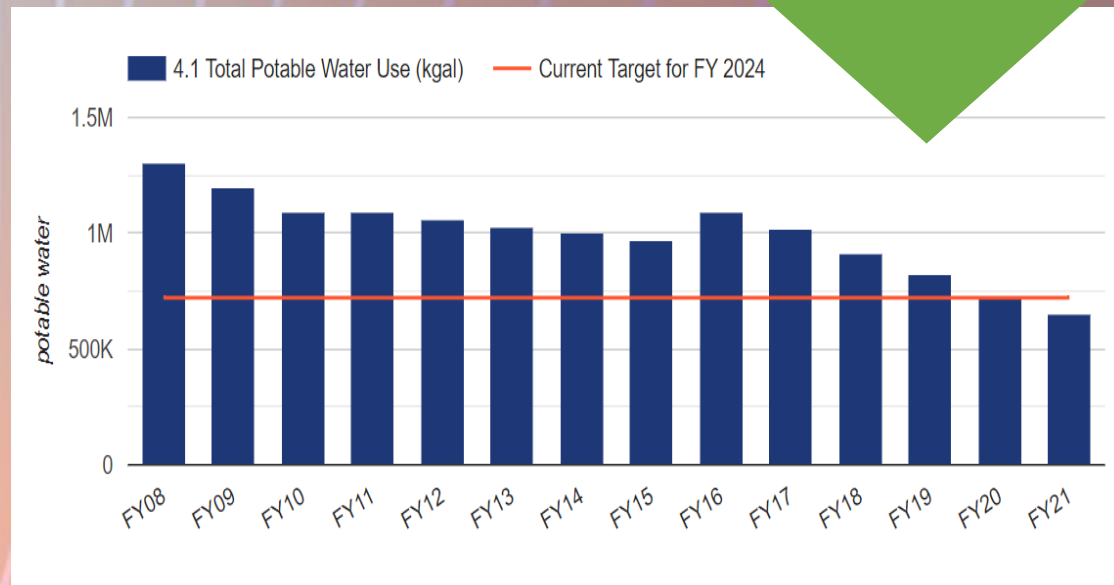
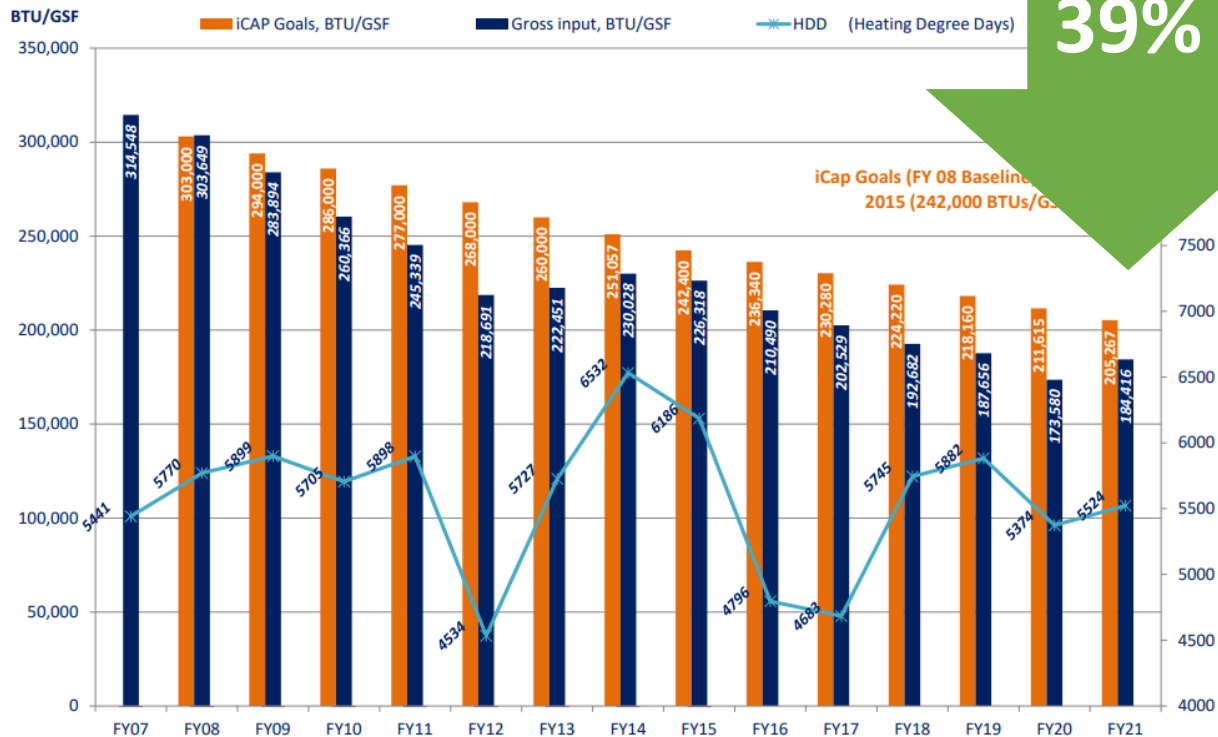


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Energy Intensity

Water Use

ENERGY USAGE TREND AT URBANA-CHAMPAIGN Actual BTU /SqFt / Year (EUI)



Total Campus Greenhouse Gas Emissions



Clean Energy Successes



Illinois Geothermal Coalition



Low-Temperature Geothermal Research and Applications



IWRC ILLINOIS WATER RESOURCES CENTER | **I** FACILITIES & SERVICES UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN | **ISEE**



Biomass Boiler



Wind Agreement
(25,000 MWh/yr)

Solar Farm 1.0 (5 MW → 7,000 MWh/yr)



Solar Farm 2.0 (12 MW → 20,000 MWh/yr)



iCAP Current Priorities

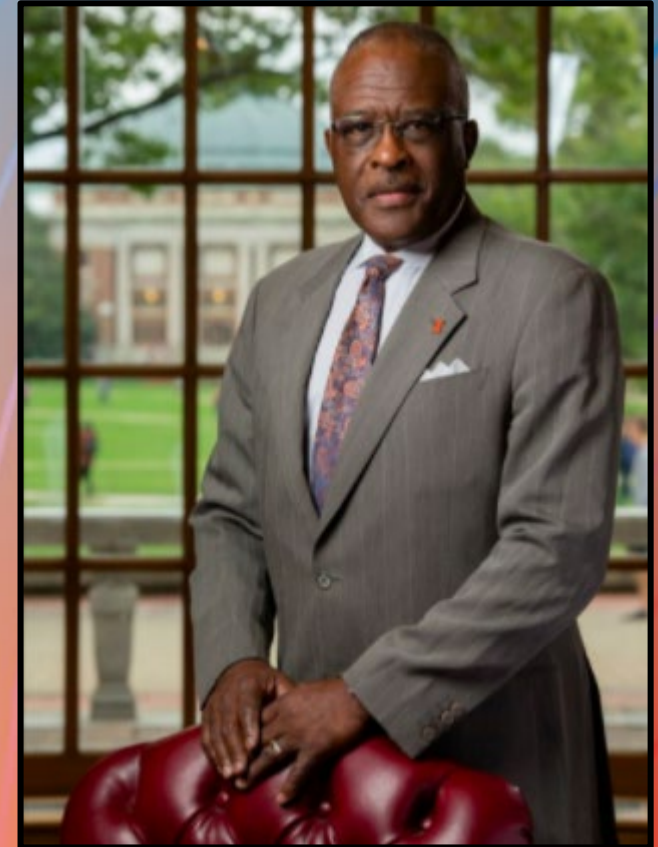
iCAP Priority Needs

- Solar Farm 3.0 to meet our goal of 140 GWh/year
- Transition to clean thermal energy, like geothermal
- Develop and implement Resilient Landscape Strategy
- Funding for Comprehensive Energy Planning Document
- Form Green Labs committee and Electric Vehicle (EV) task force
- Reach STARS Platinum
- Include iCAP in Campus Strategic Plan



Robert J. Jones

Chancellor



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Susan Martinis

*Vice Chancellor for
Research and
Innovation*

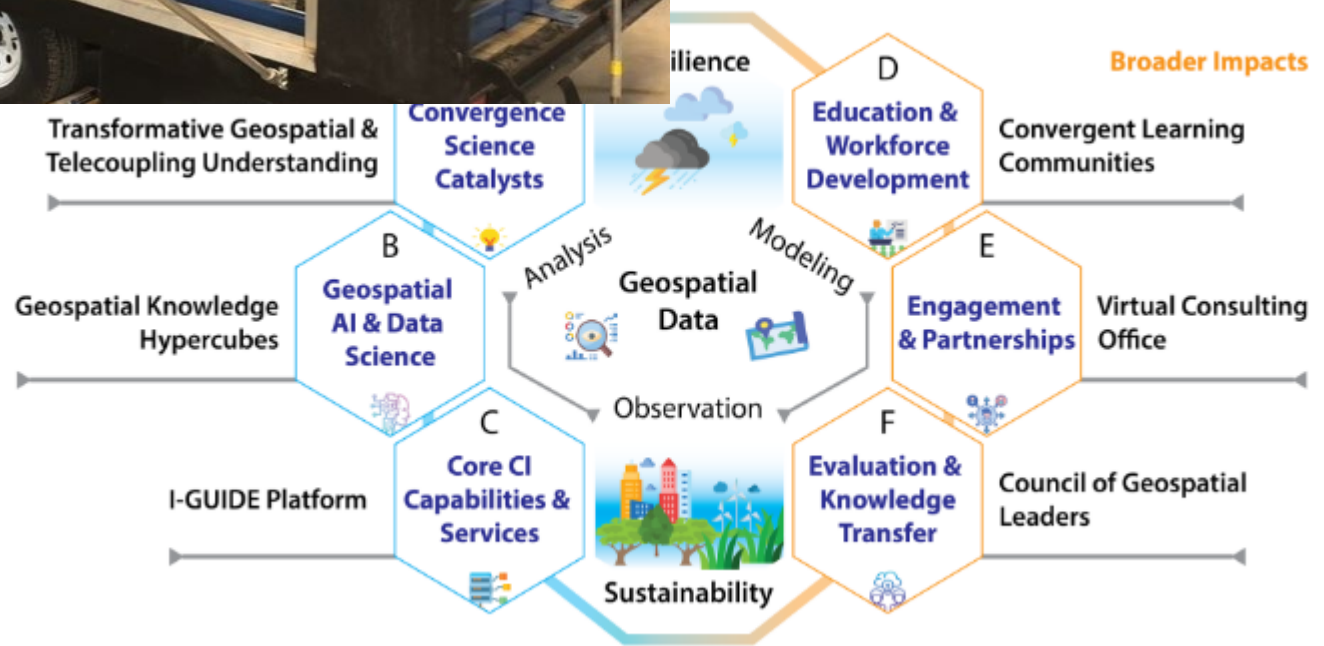


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Research



Repeat Wins!

Savings

- 385,075 kWh/year
- \$32,385/year
- 34 participating labs
- 1,055 kWh/day

2021 INTERNATIONAL LABORATORY FREEZER CHALLENGE



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Energy,
UNIVERSITY OF



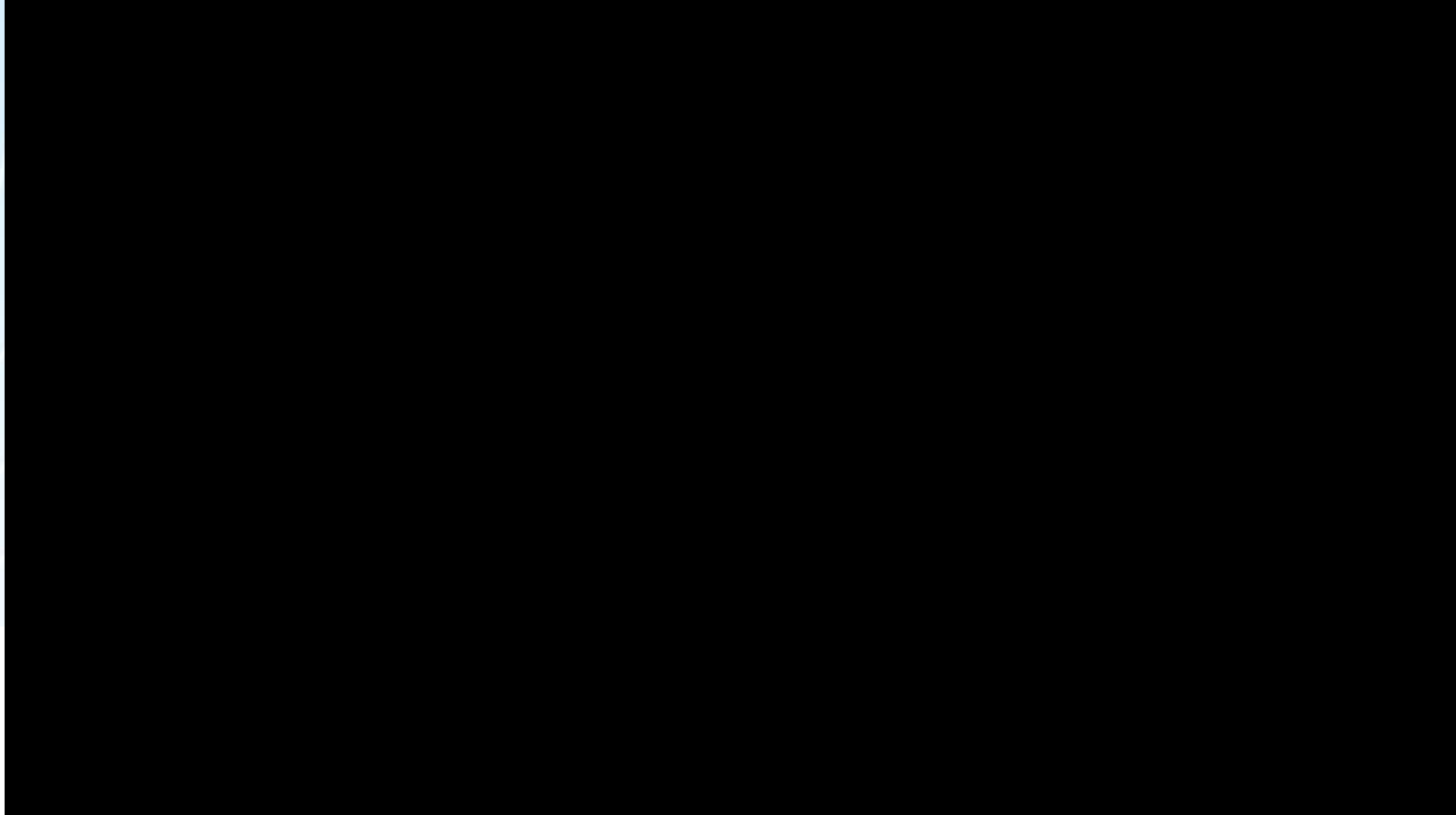
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First Place



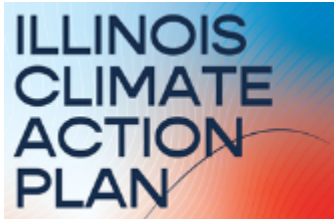
Sustainability Best Practices

http://go.illinois.edu/sust_training



Illinois Student Government (ISG)

ISG Committee on Environmental Sustainability



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Student Sustainability Committee



Student Sustainability Leadership Council



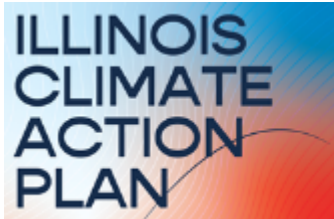
Sustainability Highlights

Eric Green, *iSEE Academic Advisor/Instructor*

Meredith Moore, *iSEE Sustainability Programs Manager*

Morgan White, *Associate Dir. of F&S for Sustainability*

Ximing Cai, *iSEE Director of Campus Sustainability*



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Sustainability, Energy, and Environment Fellows Program

Environmental Leadership Program (ELP)

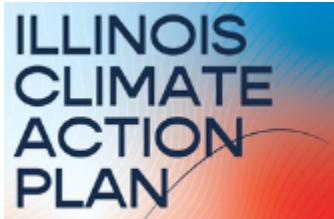
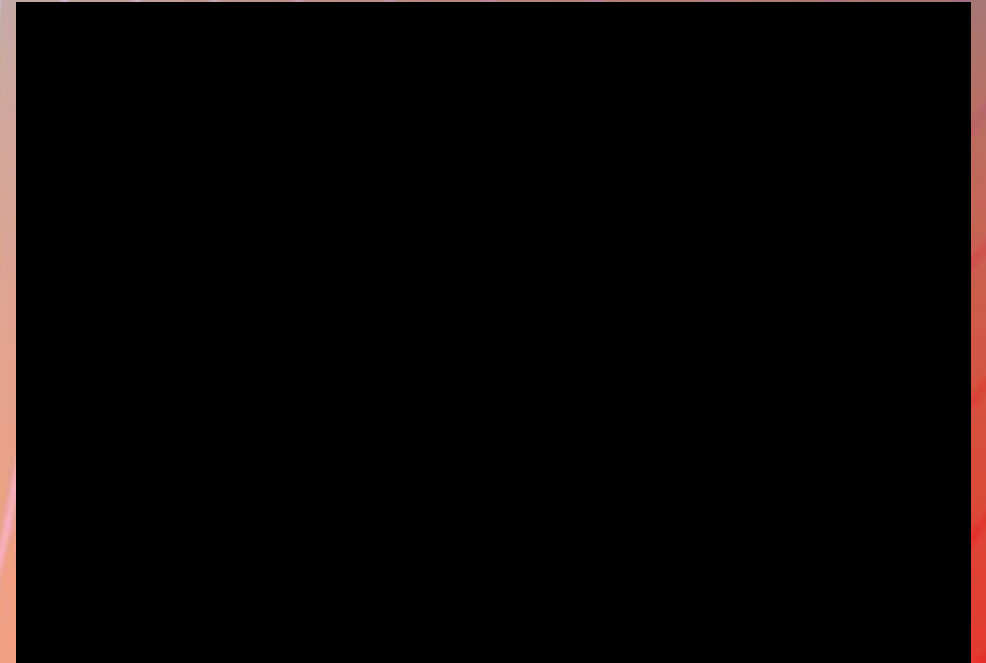


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Certified Greener Campus Programs

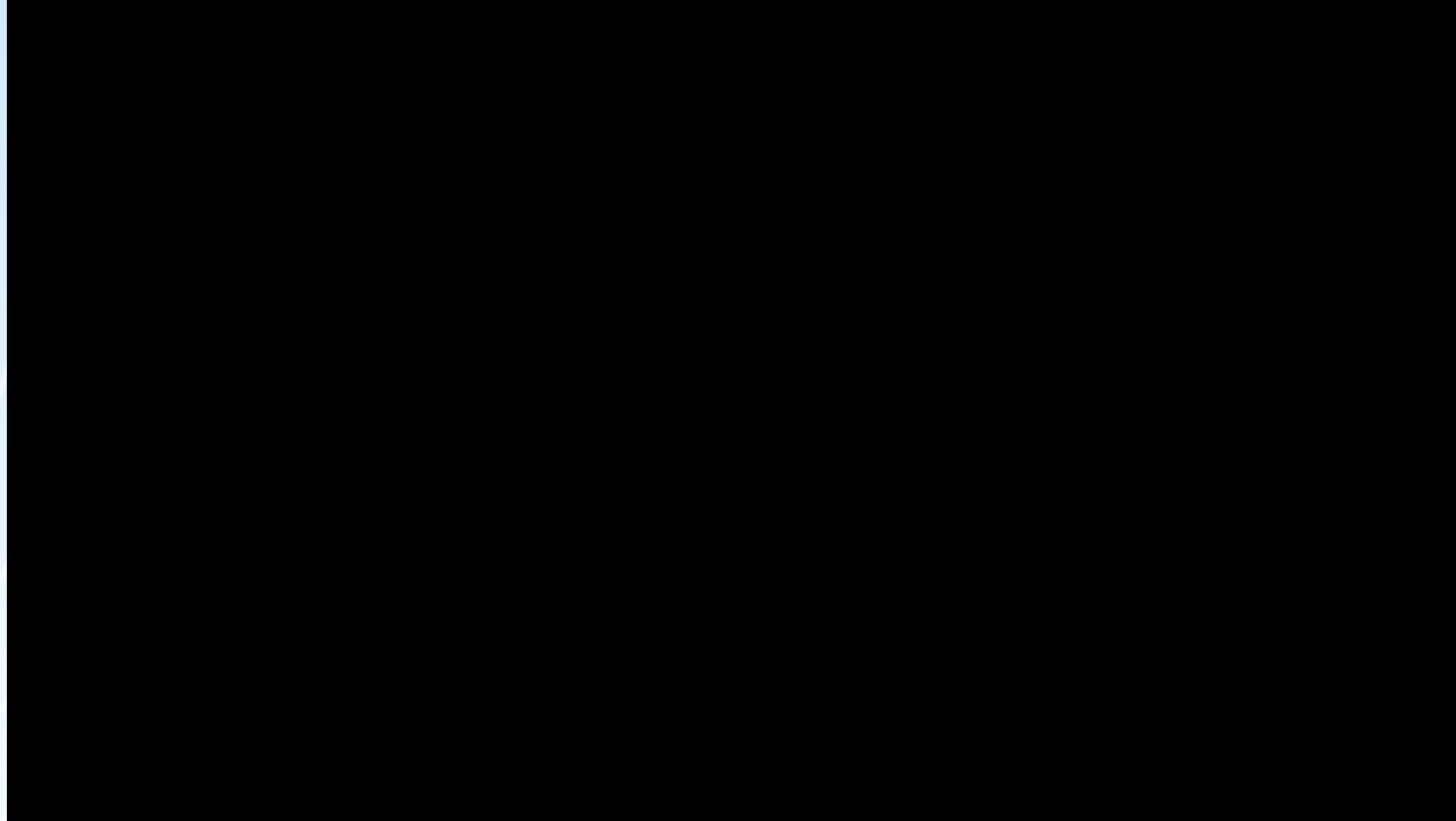


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Illini Lights Out



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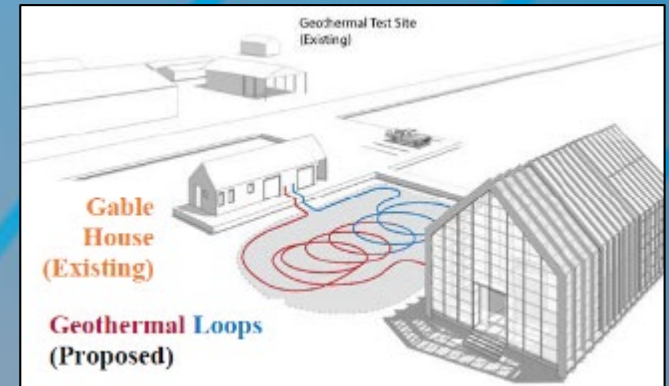
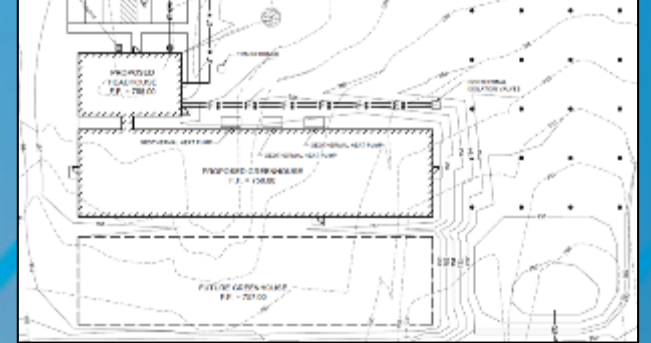
Solar Farm 2.0

Key Notes

- 20,000 MWh/year
- \$300,000 saved/year
- Tracking and bi-facial solar panels
- Pollinator plantings under solar panels
- Research and teaching benefits



Geothermal Projects



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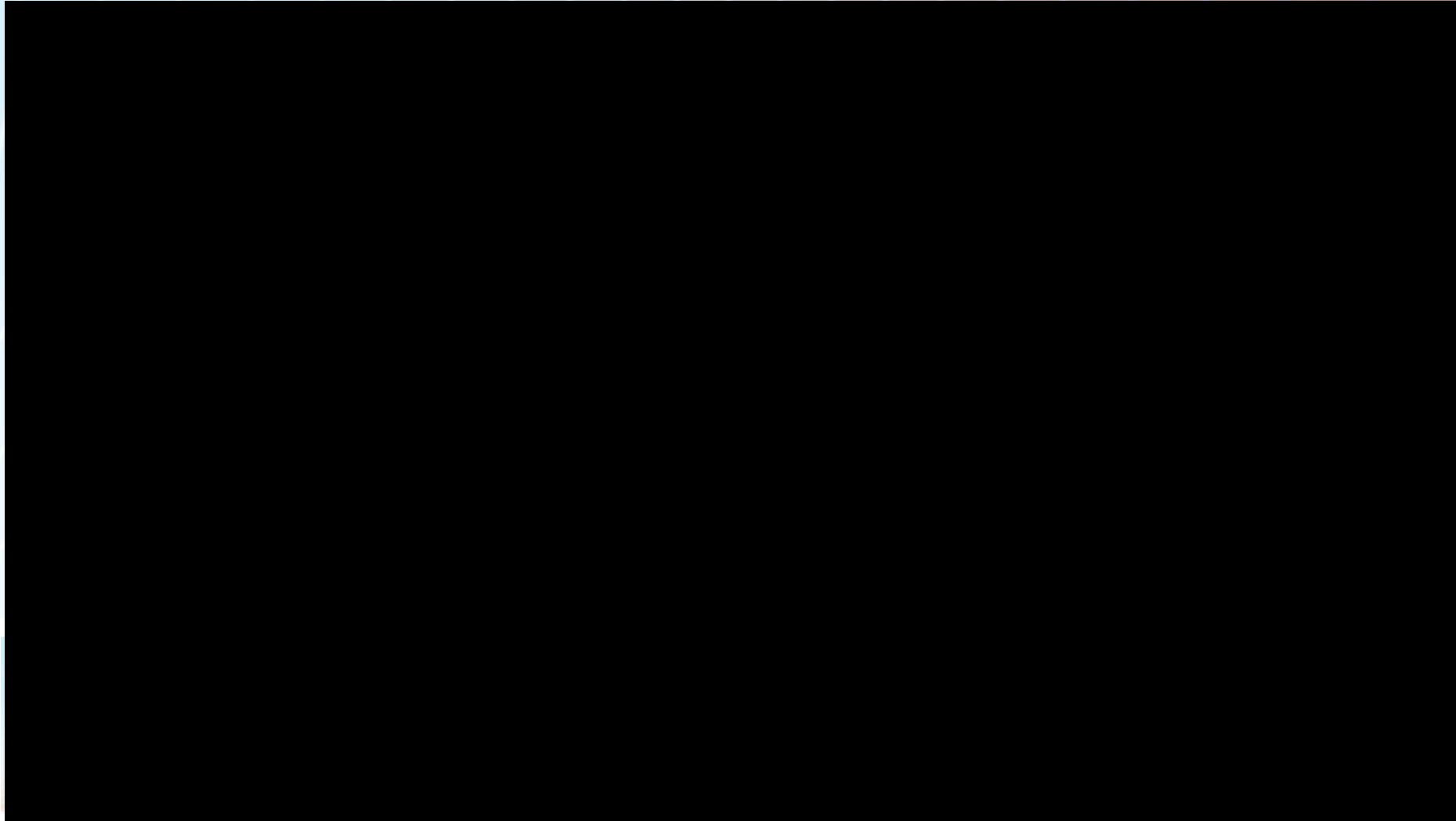


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Sustainable Transportation: Bikes



Red Oak Rain Garden



Recycling and Composting



← Pledge to
“Use the Bin”

iCAP Portal Objectives Dashboard

TikTok @fssustainability



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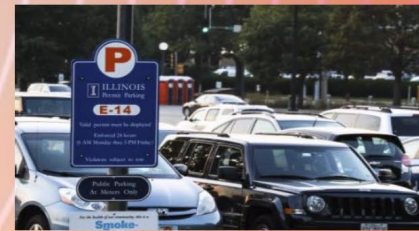
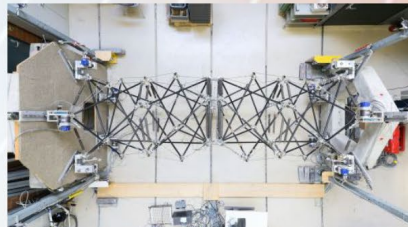


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Campus as a Living Lab Projects



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Energy Conservation Incentive Program (ECIP) Awards

Rob Roman, *Director of Utilities & Energy Services (UES)*

Karl Helmink, *F&S Associate Director of UES*

Paul Foote, *F&S RCx and Energy Efficiency Specialist*



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Energy Advancement Winners



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**ENERGY CONSERVATION
INCENTIVE PROGRAM**

Early Child Development Laboratory

ENERGY ADVANCEMENT CATEGORY

4th Place

**25% Energy Saved
from FY20 to FY21**

go.fs.illinois.edu/ecip



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ENERGY CONSERVATION
INCENTIVE PROGRAM

Levis Faculty Center

ENERGY ADVANCEMENT CATEGORY

3rd Place

**33% Energy Saved
from FY20 to FY21**

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**ENERGY CONSERVATION
INCENTIVE PROGRAM**

Forbes Natural History Building

ENERGY ADVANCEMENT CATEGORY

2nd Place

**37% Energy Saved
from FY20 to FY21**

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ENERGY CONSERVATION
INCENTIVE PROGRAM

Stock Pavilion

ENERGY ADVANCEMENT CATEGORY

1st Place

**41% Energy Saved
from FY20 to FY21**

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Occupant Action Winners

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**ENERGY CONSERVATION
INCENTIVE PROGRAM**

Campus Recreation Center East

OCCUPANT ACTION CATEGORY

4th Place

**24.93% Energy Saved
from FY20 to FY21**

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ENERGY CONSERVATION
INCENTIVE PROGRAM

English Building

OCCUPANT ACTION CATEGORY

3rd Place

**25.32% Energy Saved
from FY20 to FY21**

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ENERGY CONSERVATION
INCENTIVE PROGRAM

Student Dining Residential Programs Building

OCCUPANT ACTION CATEGORY

2nd Place

**45% Energy Saved
from FY20 to FY21**

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ENERGY CONSERVATION
INCENTIVE PROGRAM

Ice Arena

OCCUPANT ACTION CATEGORY

1st Place

**54% Energy Saved
from FY20 to FY21**

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Honorable Mention Winners



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ENERGY CONSERVATION
INCENTIVE PROGRAM

State Farm Center

OCCUPANT ACTION CATEGORY

Honorable Mention

**16% Energy Saved
from FY20 to FY21**

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**ENERGY CONSERVATION
INCENTIVE PROGRAM**

Bielfeldt Athletic Administrative Building

OCCUPANT ACTION CATEGORY

Honorable Mention

**16% Energy Saved
from FY20 to FY21**

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Congratulations!!!

Please share your success.



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Poster/Tabling Session

Until 3:15 PM



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iCAP Team Priorities



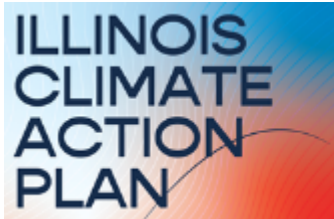
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Energy Priorities

- Fund efforts in support of the Comprehensive Energy Plan.
- Fund a space use campus watchdog responsible for enforcing zero-growth
- Increased compliance with State Building Energy codes.
- Make sure all the costs for implementing the iCAP are thoroughly understood.



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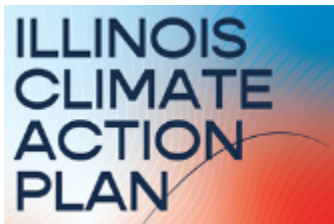
Transportation Priorities

- Assess the various projects associated with reducing vehicles on campus and develop a prioritization system
- Advance the creation of the commuter program
- Resume progress on developing fleet replacement plans and submit a formal recommendation.
- Encourage implementation of the newly developed remote and hybrid work policies post COVID.



Land and Water Priorities

- Identify funding source for rainwater management projects, possibly through creation of stormwater utility fee
- Create Campus Landscape Master Plan
- Increase Green Infrastructure and number of trees
- Explore flood management
- Implementing the Resilient Landscape Strategies is a major priority right now because it has been the majority of the team's discussions in 2021.
- The team will continue to track and publish metrics, which will guide the team's ongoing priorities. Metrics are lacking for monitoring soil health.



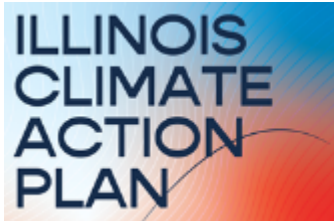
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Zero Waste Priorities

- Hire a Zero Waste Coordinator
- Recommendation to Chancellor's Office to host Zero Waste event
- Reducing bottled water usage—informational campaign
- Waste categorization of litter in Boneyard Creek/Green Street—
who/what are the biggest polluters?
- Waste auditing of campus events (tailgating/football games, Quad Day, Spring Jam, graduation)
- Creating clearer metrics to assess green cleaning program
- Create portal to track food wastage



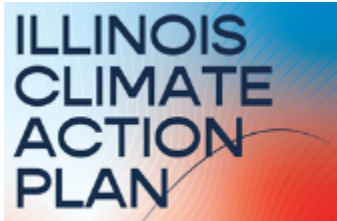
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Education Priorities

- Support the advancement of the Sustainability General Education Requirement proposal
- Explore methods under objective 6.1, including sustainability workshops, units in 100-level college classes, and in new student orientation
- Hold one additional Sustainability Career Fair event
- Begin process of establishing Graduate Certificate in Sustainability
- Continue to work with Career Center in the development of Green Career Fair.



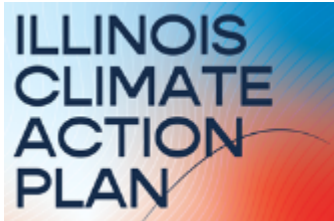
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Engagement Priorities

- Increasing visibility of iCAP and sustainability programming on campus
- Getting iCAP Portal linked on Illinois Homepage, and on colleges' websites
- Focusing on technology to inform our engagement efforts
- Increasing our efforts to engage diverse groups of individuals, both on and off campus
- Create a CGOP Challenge Program and collaborate with Public Affairs to promote it
- Work with DIA to join the Green Sports Alliance



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Resilience Priorities

- The Environmental Justice (EJ) Plan is a key priority for our campus and community
- We are excited to make progress on the Biodiversity Plan
- Addressing rainwater management across the urbanized area, including mapping green stormwater infrastructure
- Clarifying the needs and scope for developing a local carbon offsets program



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iCAP Current Priorities

iCAP Priority Needs

- Solar Farm 3.0 to meet our goal of 140 GWh/year
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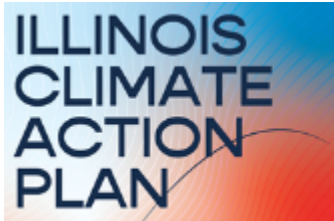
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In Summary:

“By the end of FY22, I would like to see universal commitment to sustainability including the end of the COVID pandemic, justice for all, elimination of hunger and poverty, world peace, net zero emissions, and conservation of ecosystems (not necessarily in that order of priority).” – iCAP Team member



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A graduate in a blue and orange gown with arms raised, and a Buddha statue, against a bright sky.

Thank you!!