

# 2015 iCAP Objectives: Point People and Tasks

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**STATUS OF OBJECTIVES AND TASKS  
AUGUST 18, 2016  
FROM SUSTAINABILITY STAFF:  
MORGAN JOHNSTON, STEPHANIE LAGE,  
AND OLIVIA WEBB**

**POINT PEOPLE CONFIRMED BY IWG  
[HTTP://ICAP.SUSTAINABILITY.ILLINOIS.EDU/FILES/PROJECT/2634/2015ICAPWEB.PDF](http://icap.sustainability.illinois.edu/files/project/2634/2015icapweb.pdf)**

# Overview of Briefing

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- This briefing covers 2015 iCAP Objectives.
- Each Objective is assigned to a Campus Point Person, even if the tasks cover multiple campus units.
- **Orange represents F&S-owned Objectives.**
- **Blue represents non-F&S-owned Objectives.**

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• Campus Owner:  
- [Name]

[Key topic]

iCAP Chapter[#]  
[ChapterName]  
Objective #[#]  
[Objective as written in iCAP]

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• Campus Owner:  
o [Name]

• Current Status: [Overall Status]  
o [Note 1]  
o [Note 2]

• Key and Related Metrics:  
o [Metric 1]  
o [Metric 2]  
x [sub-metric 1]

Facilities & Services

0/12/2015

- Some Objectives are followed by related tasks.
- Tasks could be general programs or specific projects (large or small).
- Metrics, images, or links can be included with the Tasks comments.

[Key Words] - Tasks

[Task 1]

- Task Owner: [Name]
- Status: [general status]
  - o [Note 1]
  - o [Note 2]

[Task 2]

- Task Owner: [Name]
- Status: [general status]
  - o [Note 1]
  - o [Note 2]

[Task 3]

- Task Owner: [Name]
- Status: [general status]
  - o [Note 1]
  - o [Note 2]

Facilities & Services

0/12/2015

## Space

### iCAP Chapter 2

### Energy Conservation and Building Standards

### Objective #1

Maintain or reduce the campus gross square footage relative to the FY10 baseline.

- **Campus Point Person:**
  - F&S, Elizabeth Stegmaier
- **Current Status: Complete**
  - Helen presented an overview of the new CAM policy to the CCRC on 9/23/2015.
  - Christine Syvertson runs annual report.
- **Key and Related Metrics:**
  - Baseline Gross Square Feet
  - Annual Gross Square Feet, as of 6/30 at the end of each fiscal year.
  - Square footage in the “bank” each year, as of 6/30.

# Space - Tasks

## Net Zero Growth Space Policy

- Task Owner: F&S, Ted Christy
- Status: completed – needs to be maintained
  - Adopted into the Campus Administrative Manual 6/10/2015, effective 7/1/2015
    - ✦ <http://cam.illinois.edu/viii/VIII-23.htm>
  - Includes all on and off-campus space, as listed in Archibus
    - ✦ Report in FIR at J:\09\_Space\_Management\Reports\Reoccurring Reports\Zero\_Net\_Growth
  - FY10 Total GSF Baseline = 23,476,446 GSF
  - FY15 Total GSF = 23,395,427 GSF, a reduction of 81,019 GSF
  - Ted Christy meets regularly with Matthew Tomaszewski and Jill Maxey
  - FY10 Total GSF Baseline includes: 50,000 for IBRL, 186,114 for Bousfield Hall – done, 150,000 for Assembly Hall, 235,000 for ECE – done
  - FY15 Total GSF needs to be adjusted for the projects that received project approval before the CAM policy was established. – Ted, Morgan, and Jill are working on defining the GSF adjustment.

## Energy Standards

### iCAP Chapter 2

### Energy Conservation and Building Standards

### Objective #2

Identify the highest achievable energy standards for new buildings and major renovations, and incorporate these into the campus facility standards by the end of FY16.

- **Campus Point Person :**
  - F&S, Jim Sims
- **Current Status: in progress**
  - Fred gave a presentation to the SWATeam about the complexity of the new IL energy Conservation Code
  - Completion will be delayed past June 30, 2016
- **Key and Related Metrics:**
  - Yes or No – Do the facility standards include the highest achievable energy standards?
    - ✦ Number of “Green Buildings” (eg. LEED)

# Energy Standards - Tasks

## Building Code Requirements

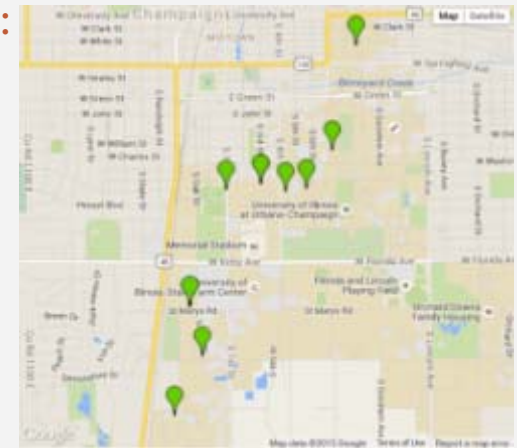
- Task Owner: F&S, Fred Hahn
- Status: in progress
  - Clarified the legal requirements
  - Currently LEED Silver is required by the Facility Standards
  - Morgan gathering a Consultation Group – Fred to present at first meeting

## Energy Star Certification

- Task Owner: iSEE, Madhu Khanna
- Status: pending
  - iSEE is assisting with the community focused U-C Energy Star Challenge
  - UIUC had 2014 and 2015 winners
  - Chandana is student champion for summer 2016

## LEED Certification

- Task Owner: F&S, Fred Hahn
- Status: ongoing
  - <http://www.fs.illinois.edu/projects/leed-certifications>
  - Over 10% of campus GSF is LEED Certified or in the process of seeking LEED certification
  - Hiring an engineer, w/LEED expertise
  - Map of LEED certified buildings on iCAP Portal:



## Energy Conservation

### iCAP Chapter 2

### Energy Conservation and Building Standards

### Objective #3

Strengthen centralized conservation efforts focusing on building systems, to achieve a 30% reduction in total campus buildings energy use by FY20. This includes meeting the LED Campus commitments.

- **Campus Point Person :**
  - F&S, Kent Reifsteck
- **Current Status: in progress**
  - Current lack of funding is weakening energy conservation rather than strengthening it.
  - ECBS SWATeam is writing a recommendation to reinstate funds
- **Key and Related Metrics:**
  - **Total Energy Delivered to Campus Buildings, excluding Petascale**
    - ✦ # of RCx buildings
    - ✦ # of LED exit signs installed
    - ✦ More conservation project-based metrics

# Energy Conservation - Tasks

## Retrocommissioning

- Task Owner: F&S, Karl Helmink
- Status: ongoing
  - More than 60 buildings complete, approximately 8M GSF as of FY15
  - Average energy reduction of 27%
  - Cumulative cost avoidance of \$30M

## Fume Hoods

- Task Owner: F&S, Jeremy Neighbors
- Status: ongoing
  - Suggested a meeting with iSEE and F&S to review status and next steps
  - Turning into Green Labs initiative?

## Energy Performance Contracting

- Task Owner: F&S, Josh Whitson
- Status: ongoing
  - Progressing well with existing EPC
  - Current EPC is five engineering buildings – working on mechanical, electrical, and plumbing systems

## Maintenance Program

- Task Owner: F&S, Dave Boehm
- Status: ongoing
  - Preventive Maintenance is expanding
  - F&S working on handoff from RCx



# Energy Conservation - Tasks

## Lighting Retrofit (T-12 to T-8)

- Task Owner: F&S, Robert Halverson
- Status: nearing completion
  - ICECF grant ended 12/31/2015
  - LED fact sheet to be shared with facility liaisons in February 2016

## LED Exit Signs

- Task Owner: F&S, Ken Buenting
- Status: ongoing
  - Summary of efforts is underway
  - Follow up request for next round of campus funding will be proposed by Ken, using input from Morgan, Brian, and Building Maintenance

## IT Energy Efficiency

- Task Owner: iSEE, Olivia Webb
- Status: pending
  - Nishant opened conversation with Technology Services in fall 2015
  - Olivia planning to talk to appropriate stakeholders this summer

## LED Exterior Lighting

- Task Owner: iSEE
- Status: needed
  - Need to set expectations for street lights and wall pack upgrades
  - Need to set expectations for Parking area upgrades – add to facility standards

## Energy Campaign

### iCAP Chapter 2

### Energy Conservation and Building Standards

### Objective #4

Engage and incentivize the campus community in energy conservation, including a comprehensive energy conservation campaign, with at least 50% of units participating by FY20.

- **Campus Point Person:**
  - iSEE w/ECBS SWATeam
- **Current Status: in progress**
  - SWATeam tested pilot Illini Lights Out program in April 2016
  - Certified Green Office Program 2.0 being run by Olivia Webb, and she is developing a 3.0 for fall 2016
  - Green Labs Initiative being discussed
- **Key and Related Metrics:**
  - % of units participating in energy conservation campaigns
    - ✦ # of units participating
    - ✦ # of participating employees

# Energy Campaign - Tasks

## Certified Green Office Program

- Task Owner: iSEE, Olivia Webb
- Status: ongoing
  - Launched November 30
  - 2.0 underway
  - 3.0 in development

## ECIP Incentives

- Task Owner: F&S, Mike Marquissee
- Status: ongoing
  - How can this be done in a more robust fashion?
  - Planned changes for FY17 to focus on behavior change and increased communication efforts.

## Illini Energy Dashboard

- Task Owner: F&S, Mike Marquissee
- Status: ongoing
  - What is happening with the EDNA online portal?
  - SWATeam updated text on dashboard
  - How will water be integrated into the dashboard?
  - How do we get these into the buildings themselves?

## Campus Green Teams

- Task Owner: iSEE
- Status: in progress
  - SWATeams and iWG
  - ISTC hosts the e-waste green team
  - CGOP Sustainability Ambassadors
  - How do we utilize these contacts?

## Clean Energy Options

### iCAP Chapter 3

Energy Generation, Purchasing, and Distribution

### Objective #1

The Generation, Purchasing, and Distribution SWATeam, in collaboration with Facilities & Services and topical Consultation Groups, will lead an exploration of options for 100% clean campus energy during FY16, and submit recommendations through the formal sustainability process.

- **Campus Point Person:**
  - iSEE with eGen SWATeam
- **Current Status:**
  - SWATeam proposed a study of electrifying campus space and water heating, for \$300,000 needs funding
  - Biomass consultation group continues
  - Geothermal research underway through ISGS, funded by SSC.
- **Key and Related Metrics:**
  - # of options considered?
  - # of recommendations submitted?

## Solar Energy

### iCAP Chapter 3

Energy Generation,  
Purchasing, and  
Distribution

### Objective #2

Expand on-campus solar energy production. By FY20, produce at least 12,500 MWh/year, and by FY25 at least 25,000 MWh/year, from solar installations on campus property.

- **Campus Point Person:**
  - iSEE, Morgan Johnston
- **Current Status:**
  - Solar Farm in production
  - Rooftop Solar options being investigated by students
  - SSC funded an 11 kW array on the Speech and Hearing Building – Morgan is working to move it forward.
- **Key and Related Metrics:**
  - Total MWh per year from on campus solar

# Solar Energy - Tasks

## Solar Farm

- Task Owner: F&S, Keith Erickson
- Status: ongoing
  - Ribbon cutting completed 11/19/15
  - Commercial Operation Date 12/11/15

## General Rooftop Solar

- Task Owner: iSEE, Morgan Johnston
- Status: prioritizing options
  - DOR has rooftop solar as building occupants' responsibility for maintenance
  - Working with Building Maintenance to review potential roofs

## ECE Rooftop Solar

- Task Owner: ECE, Joyce Mast
- Status: pending
  - Joyce received discounted list for many panels
  - Needs funding approval from Department and College
  - Students interested in advocating for this funding

## Specific Rooftop Solar

- Task Owner: multiple
- Status: pending
  - Speech and Hearing – in design
  - iSEE solar array – cancelled for now
  - A&D Building solar design - underway
  - PPSB solar design – ready for engineering review

## Clean Energy

### iCAP Chapter 3

Energy Generation,  
Purchasing, and  
Distribution

### Objective #3

Expand the purchase of clean energy. By FY20, obtain at least 120,000 MWh, and by FY25 at least 140,000 MWh from low-carbon energy sources.

- **Campus Point Person:**
  - F&S, Kent Reifsteck
- **Current Status:**
  - The Wind PPA in negotiations
  - PEI planning an RFP for renewable energy procurement services, requested by UIC's Cindy Klein-Banai
- **Key and Related Metrics:**
  - Total MWh per year of clean energy
  - % of campus energy coming from low-carbon sources

# Clean Energy - Tasks

## Wind Power Purchase Agreement

- Task Owner: Kent Reifsteck
- Status: in progress
  - Selected 25,000 MWh/yr quantity
  - Need PPA for FY17-FY26
  - Slated to begin delivery July 1, 2016
  - Letter of Intent signed 1/12/16

## RECs purchases

- Task Owner: Kent Reifsteck
- Status: under discussion
  - Purchased RECs for FY15
  - Considering RECs for FY16

## Renewable Portfolio Strategy

- Task Owner: Kent Reifsteck
- Status: gathering info
  - Kent to talk to PEI about Altenex
  - Email exchange with Ben 2/16/16



## Offset Petascale

### iCAP Chapter 3

Energy Generation,  
Purchasing, and  
Distribution

### Objective #4

Offset all emissions  
from the National  
Petascale Computing  
Facility (and other  
successor facilities) by  
FY18.

- **Campus Point Person :**
  - NCSA w/iSEE
- **Current Status:**
  - Pending new contract
- **Key and Related Metrics:**
  - % of Petascale emissions offset

## Air Emissions

iCAP Chapter 4

Transportation

Objective #1

Reduce air travel emissions from a new FY14 baseline by 25% by FY20, 50% by FY25, and 100% by FY30.

- **Campus Point Person :**
  - **iSEE, Ben McCall**
- **Current Status:**
  - **pending**
- **Key and Related Metrics:**
  - **% of air travel emissions offset**
    - ✦ # of air travel emissions
    - ✦ # of air travel emissions offset

## Fleet Emissions

iCAP Chapter 4

Transportation

Objective #2

Reduce emissions from the campus fleet by 20% for departmentally owned and car pool vehicles by FY20.

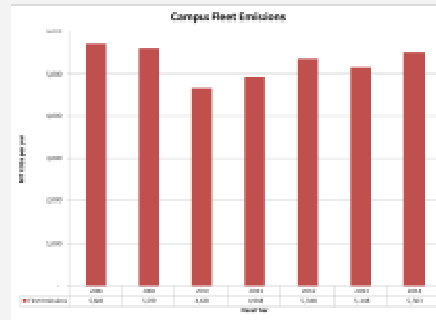
- **Campus Point Person :**
  - F&S, Pam Voitik
- **Current Status:**
  - The F&S Green Fleet Plan was recognized at Tier 2.
  - Campus sets the standards, and F&S provides oversight for vehicle purchases and audit inquiries
- **Key and Related Metrics:**
  - **Annual fuel consumption**
    - ✦ # of low emission vehicles
    - ✦ Idle time
    - ✦ Fuel efficiency
    - ✦ Miles driven

# Fleet Emissions - Tasks

## Non-F&S vehicles

- Task Owner: Pete Varney
- Status: not started

GHG Emission chart shown → FY08 to FY14 3% reduction



## Car Pool Vehicles

- Task Owner: Pete Varney
- Status: not started

## F&S Green Fleet Plan

- Task Owner: Pete Varney
- Status: in progress
- FY15 Truck pool baseline data
  - Fleet size capped at 270
  - Baseline fuel consumption set at 140k gallons
- FY16 specific goals
  - Announce plan and intent
  - Establish process regarding vehicle use data collection
    - ✦ Idle time
    - ✦ Fuel efficiency
    - ✦ Miles driven
  - Develop driver education materials
  - Fuel Consumption, target not to exceed FY15 level

## Renewable Fleet Study

iCAP Chapter 4

Transportation

Objective #3

Conduct a detailed study by the end of FY17 to develop scenarios for complete conversion of the campus fleet to renewable fuels.

- **Campus Point Person :**
  - iSEE w/Transp. SWATeam
- **Current Status: Pending**
  - CEE 398 PBL class project estimated volume of CNG needed for campus fleet and available from UCSD
- **Key and Related Metrics:**
  - # of scenarios considered?

## Staff Mode Shift

iCAP Chapter 4

Transportation

Objective #4

Reduce the percentage of staff trips made using single-occupancy-vehicles from 65% to 55% by FY20, 50% by FY25, and 45% by FY30.

- **Campus Point Person :**
  - F&S, Jim Sims
- **Current Status:**
  - Stacey and Lily developing the project priorities
  - Parking is planning a survey that will provide new mode-split data
- **Key and Related Metrics:**
  - % of staff trips made using single-occupancy-vehicles, by fiscal year

# Staff Mode Shift - Tasks

## Active Transportation Website

- Task Owner: iSEE
- Status: complete
  - <http://sustainability.illinois.edu/campus-sustainability/actionsinitiatives/sustainable-alternative-transportation/>

## It's Your MTD, Too

- Task Owner: F&S, Lily Wilcock
- Status: pending

## Encourage Walking

- Task Owner: Wellness Center
- Status: in progress
  - Walking tours
  - Assessments

## Behavior Change Campaign

- Task Owner: F&S, Lily Wilcock
- Status: pending
  - Plan to be developed for FY17

## Bike Plan

### iCAP Chapter 4

### Transportation

### Objective #5

Implement the Campus Bike Plan on the schedule noted in that plan. Notable deadlines include full implementation of new bikeway facilities by FY25, bike parking within 150 feet of every building in the core of campus by FY20, and bike rentals by FY20.

- **Campus Point Person :**
  - F&S, Jim Sims
- **Current Status:**
  - Bike Parking upgrade project nearing completion; additional locations to be added
  - Bronze Bicycle Friendly University
  - Bike Census occurred in April
  - MCORE complete streets on schedule
- **Key and Related Metrics:**
  - % of proposed network installed
  - % of university-owned buildings in CATS Zones 1 and 2 that have bicycle parking available within 150 feet
  - # of bikes counted during Bike Census



# Bike Plan - Tasks

## Bike Parking Upgrades

- Task Owner: F&S, Stacey DeLorenzo
- Status: in progress
  - % of university-owned buildings in CATS Zones 1 and 2 that have bicycle parking available within 150 feet
  - # of bikes counted in Bike Census

## MCORE Complete Streets

- Task Owner: F&S, Roland White
- Status: in progress
  - First projects to begin construction in Fall 2016
  - Green, Wright, White, and Armory
  - Complete Streets

## BFU Application

- Task Owner: F&S, Lily Wilcock
- Status: complete
  - Designated as Bronze level, again

## Campus Bike Center

- Task Owner: F&S, Stacey DeLorenzo
- Status: in progress
  - # of memberships
  - # of visits per year

## Active Transportation Coordinator

iCAP Chapter 4

Transportation

Objective #6

Appropriately staff sustainable transportation efforts, especially through the hiring of an Active Transportation Coordinator.

- **Campus Point Person :**
  - F&S, Jim Sims
- **Current Status: Complete**
  - Hired a Visiting AP, due to non-permanent funding
  - Lily Wilcock hired, started Feb 22, 2016
- **Key and Related Metrics:**
  - Yes or No – Was this position filled?  
**Yes**

## Publicize Water Use Data

### iCAP Chapter 5

### Water and Stormwater

### Objective #1

Obtain and publicize more granular water use data by FY16, including water quantity and quality data where available.

- **Campus Point Person :**
  - F&S, Kent Reifsteck
- **Current Status:**
  - This data is currently available for potable water use by month and building in the Energy Billing System.
  - It will be available at the campus-wide level with the F&S metrics dashboard. Alternatives to the current Energy Dashboard are being explored.
- **Key and Related Metrics:**
  - Yes or No – Is the potable Water Data provided online?

## Cooling Tower Water Use

### iCAP Chapter 5

### Water and Stormwater

### Objective #2

Improve the water efficiency of cooling towers by limiting the amount discharged to sewer to less than 20% of water intake for chiller plant towers, and less than 33% for stand-alone building towers, by FY20.

- **Campus Point Person :**
  - F&S, Kent Reifsteck
- **Current Status:**
  - Keith Erickson and Mike Larson met with Kent, and determined that acid treatment was not a viable option.
  - Kishore Rajagopalan working on a related proposal.
- **Key and Related Metrics:**
  - Water usage at chiller plants
  - Water usage at stand along building cooling towers

## Water Audit

### iCAP Chapter 5

### Water and Stormwater

### Objective #3

Perform a water audit to establish water conservation targets and determine upper limits for water demand by end-use, for incorporation into facilities standards by FY16.

- **Campus Point Person :**
  - iSEE w/Water SWATeam
- **Current Status: in progress**
  - Student project planned for Fall 2016
  - Should connect with Green Labs intern at iSEE
- **Key and Related Metrics:**
  - Yes or No – Was water audit performed?
  - Water Conservation Target
    - ✦ List of specific targets and related metrics, by end-use
  - Yes or Not – Were these incorporated into the facility standards?

## Benchmark Landscape Performance

iCAP Chapter 5

Water and Stormwater

Objective #4

Inventory and  
benchmark campus'  
existing landscape  
performance by FY17.

- **Campus Point Person :**
  - iSEE w/Water SWATeam
- **Current Status:**
  - Phase 1 completed by Scott Douglas, May 2016
  - Next steps to be determined and started.
- **Key and Related Metrics:**
  - Yes or No – Was landscape inventory and performance benchmarked?
    - ✦ Results of benchmarking

## Water Reuse Pilots

### iCAP Chapter 5

### Water and Stormwater

### Objective #5

Through an open solicitation process, implement at least 4 pilot projects to showcase the potential of water and/or stormwater reuse by FY20, with the objective of implementing a broader program by FY25.

- **Campus Point Person :**
  - iSEE w/ Water SWATeam
- **Current Status:**
  - Student project looked at using stormwater for irrigation by Arboretum
  - F&S, including Keith Erickson, investigated possibilities for gray water re-use at the new Design Center and the permitting process required the water to be treated enough to be potable.
  - Tracked volume of gray water needed at BIF for flushing
  - Need to investigate methods for harvesting rainwater to be used by Grounds. Perhaps install a pump station at the Dorner Drive retention pond.
  - Connect with Water Scholars
- **Key and Related Metrics:**
  - **Yes or No – Was a solicitation process completed?**
    - ✦ # of projects submitted
    - ✦ # of projects piloted
    - ✦ Gallons of water or stormwater reused

## Stormwater Quality Impacts

### iCAP Chapter 5

### Water and Stormwater

### Objective #6

Investigate the water quality impacts of stormwater runoff and potential ways to reduce stormwater pollutant discharges by FY18.

- **Campus Point Person :**
  - iSEE w/ Water SWATeam
- **Current Status:**
  - Joe Edwards (ALUFS) investigated drainage flow at South Farms to identify the best testing point
  - Similar step should be taken for storm sewer system using Scott Douglas' report as a starting point
- **Key and Related Metrics:**
  - Yes or No – Was this investigated?



## Purchasing Standards

### iCAP Chapter 6

### Purchasing, Waste, and Recycling

### Objective #1

By FY17, environmental standards will be applied to purchases of office paper, cleaning products, computers, other electronics, and freight/package delivery services. At least 50% of purchases in these categories will meet campus standards by FY20, and 75% by FY25.

- **Campus Point Person :**
  - iSEE, Ben McCall
- **Current Status:**
  - Pending
  - Recycled Content Office Paper purchasing policy under review
  - Check with Ben McCall for current status
- **Key and Related Metrics:**
  - Yes or No – Were green standards applied to office paper?
  - Yes or No – Were green standards applied to cleaning products?
  - Yes or No – Were green standards applied to electronics?
  - Yes or No – Were green standards applied to freight services?

# Purchasing Standards - Tasks

## Recycled Content Paper

- Task Owner: Ben McCall
- Status: under discussion
  - Draft policy shared with SWATeam

## Green Cleaning

- Task Owner: \_\_\_\_\_
- Status: pending
  - Complete list of FY14 cleaning purchases obtained, needs reviewed

## Electronics

- Task Owner: \_\_\_\_\_
- Status: pending
  - ISTC provides support for handling e-waste

## Freight Services

- Task Owner: \_\_\_\_\_
- Status: pending
  - University Housing set up with SmartWay Transport Partnership

## Reduce MSW to Landfills

### iCAP Chapter 6

### Purchasing, Waste, and Recycling

### Objective #2

Reduce MSW waste going to landfills. Increase the diversion rate of MSW to 45% by FY20, 60% by FY25, and 80% by FY35, while also increasing the total diversion rate to 90% by FY20 and 95% by FY25.

- **Campus Point Person :**
  - F&S, Pam Voitik
- **Current Status:**
  - The WTS is being considered for moving within the F&S organization, and the funding model is under review.
  - There are several pilot scale initiatives underway, and a SWATeam recommendation received for increasing the types of plastics recycled
- **Key and Related Metrics:**
  - Tons per year of landfilled waste
  - % MSW diversion rate
  - % total diversion rate

# Reduce Waste - Tasks

## Placement of WM within F&S

- Task Owner: Pam Voitik
- Status: under discussion

## Waste Management Rates

- Task Owner: Pam Voitik
- Status: pending
  - Not enough state funding, but currently a “free service” for state funded buildings

## Additional Recyclables

- Task Owner: Morgan Johnston
- Status: varied efforts
  - Styrofoam Recycling, iSEE
  - Glove Recycling, ISTC
  - Glass Recycling, Housing
  - Metal Shavings at Talbot Lab, iSEE
  - Additional Plastic Commodities

## Behavior Change

- Task Owner: F&S/iSEE
- Status: varied efforts
  - RecycleMania, DIA
  - Waste Characterization Studies, ISTC
  - Recycling bin labels, F&S

## Methane Capture

### iCAP Chapter 6

### Purchasing, Waste, and Recycling

### Objective #3

Utilize landfills with methane capture.

- **Campus Point Person :**
  - F&S, Pam Voitik
- **Current Status:**
  - The existing waste hauling contract is with Allied Waste Transportation, Inc., which uses a landfill with methane capture.
  - This contract has extension year options through 6/30/2019.
  - Future options have not yet been reviewed.
  - PWR Karen Hodgkin Jones investigated ghg emissions from the landfill.
- **Key and Related Metrics:**
  - Yes or No – Do we send the trash to a landfill with methane capture?

## Zero-Waste Coordinator

### iCAP Chapter 6

Purchasing, Waste, and Recycling

### Objective #4

Appropriately staff Zero Waste efforts through the hiring of a full-time Zero Waste Coordinator.

- **Campus Point Person :**
  - F&S, Pam Voitik
- **Current Status:**
  - SSC funding approved for some part-time work for Zero Waste Coordination at F&S
  - Search starting soon
  - OBFS incorporating zero-waste for purchasing in Compliance position...
- **Key and Related Metrics:**
  - Yes or No – Did we hire a full-time Zero Waste Coordinator?

## Ag. Emissions

### iCAP Chapter 7

Agriculture, Land Use,  
Food, and  
Sequestration

### Objective #1

Perform a comprehensive assessment of GHG emissions from agricultural operations, and develop a plan to reduce them, by the end of FY16.

- **Campus Point Person :**
  - iSEE w/ALUFS SWATeam
- **Current Status:**
  - ALUFS SWATeam working on this
    - ✦ SWATeam recommended a study last year; iCAP Working Group requested additional details
  - Animal counts are already included in UIUC GHG totals
  - Need to address Fertilizer data; Crop Sciences requests that we do a more complete analysis than simply filling in these two data points:
    - ✦ Synthetic Pounds, % Nitrogen
    - ✦ Organic Pounds, % Nitrogen
- **Key and Related Metrics:**
  - # of GHG emissions from Ag operations
  - Yes or No – Is there a reduction plan?

## Sustainable Landscapes

### iCAP Chapter 7

Agriculture, Land Use,  
Food, and Sequestration

### Objective #2

Design and maintain campus landscapes in a more sustainable manner; expand the specification of sustainable plantings in campus landscaping standards, develop and implement a tree care plan by FY16 and an integrated pest management program by FY17.

- **Campus Point Person :**
  - F&S, Elizabeth Stegmaier
- **Current Status:**
  - Tree Campus USA designation received
  - Need to write a policy documenting our IPM process for Grounds.
- **Key and Related Metrics:**
  - Yes or No – Are campus landscapes designed sustainably? – **yes** via Brent's design review
  - Yes or No – did the specs for sust. Plantings get updated in the Facility Standards? – **updated**, needs to go online
  - Yes or No – Is there a Tree Care Plan? - **yes**
  - Yes or No – Is there an IPM program?



# Sustainable Landscapes - Tasks

## Integrated Pest Management

- F&S Owner: Ryan Welch
- Status: not started
  - IPM exists for Grounds, but it needs to be documented.

## Tree Campus USA

- F&S Owner: Ryan Welch
- Status: ongoing
  - Application submitted in December 2015
  - Designation received spring 2016

## Sustainable Landscapes

- F&S Owner: Brent Lewis
- Status: ongoing
  - Through design reviews



## Campus Master Plan

### iCAP Chapter 7

Agriculture, Land Use,  
Food, and  
Sequestration

### Objective #3

Incorporate  
sustainability principles  
more fully into the  
Campus Master Plan

- **Campus Point Person :**
  - F&S, Elizabeth Stegmaier
- **Current Status:**
  - The Campus Master Plan is started
  - Helen is the official Campus Planner
  - Consultant is hired – data provided during spring 2016 (energy and water use by building, space bank info, transportation plans, iCAP goals, green stormwater locations and goals, etc.)
- **Key and Related Metrics:**
  - ✦ How can this be measured?
  - ✦ What does success look like?

## Local Food

### iCAP Chapter 7

Agriculture, Land Use,  
Food, and  
Sequestration

### Objective #4

Implement a project that examines the food service carbon footprint for Dining and other on-campus food vendors, while increasing local food procurement to 40% by FY25.

- **Campus Point Person :**
  - iSEE w/SWATeam, especially Housing
- **Current Status:**
  - In progress
  - Dane Hunter's thesis is a start
  - Need to identify next steps
- **Key and Related Metrics:**
  - % of food procured locally
  - Yes or No – Was the carbon footprint for Dining and other on-campus food vendors examined?

## Sequestration

### iCAP Chapter 7

Agriculture, Land Use,  
Food, and Sequestration

### Objective #5

Increase carbon sequestration in campus soils by determining the sequestration value of existing plantings and identifying locations for additional plantings, with a specific objective of converting at least 50 acres of U of I farmland to agroforestry by FY20.

- **Campus Point Person :**
  - iSEE w/SWATeam
- **Current Status:**
  - **Pending**
    - ✦ Pending tree inventory
    - ✦ Need plants, etc. for sequestration calculations
  - **Agroforestry for Food in progress,**
- **Key and Related Metrics:**
  - **Tons of GHG sequestered annually in existing plantings**
  - **Acreage dedicated to agroforestry, per year – currently 30 acres converted**

# Sequestration - Tasks

## Agroforestry for Food

- Task Owner: Sarah Taylor Lovell
- Status: in progress
  - 30 acres of trees planted

## Tree Inventory

- Task Owner: Ryan Welch
- Status: proposed
  - The existing tree inventory for campus is outdated. A new GIS collection device is needed to map the current trees and maintain the inventory annually. Funding needed.

## Plant Inventory

- Task Owner: \_\_\_\_\_
- Status: proposed

## Additional Plantings

- Task Owner: \_\_\_\_\_
- Status: proposed

## Reduce Nitrates

### iCAP Chapter 7

Agriculture, Land Use,  
Food, and  
Sequestration

### Objective #6

Reduce nitrates in agricultural runoff and subsurface drainage by 50% from the FY15 baseline by FY22.

- **Campus Point Person :**
  - iSEE w/SWATeam
- **Current Status:**
  - Joe Edwards identified the best watershed point to test runoff quality for South Farms
  - Need to initiate a test, identify nitrate sources, and recommend mitigation strategies
- **Key and Related Metrics:**
  - # of nitrates in ag runoff, per year
  - # of nitrates in subsurface drainage per year
  - % reduction from FY15 baseline, by year

## RFP for Offsets

### iCAP Chapter 8

#### Offsets

#### Objective #1

FY16, Request for Proposals process to buy verified carbon offsets.

- **Campus Point Person :**
  - iSEE, Ben McCall
- **Current Status:**
  - Pending
  - Need to identify funding
- **Key and Related Metrics:**
  - Yes or No – Was an RFP completed for buying verified carbon offsets?

## Voluntary Offsets

iCAP Chapter 8

Offsets

Objective #2

FY17, Administrative mechanism to voluntarily purchase carbon offsets.

- **Campus Point Person :**
  - iSEE, Ben McCall
- **Current Status:**
  - Pending
  - Discussion underway for virtual offset storeroom
- **Key and Related Metrics:**
  - Yes or No – Was an administrative mechanism set up to voluntarily purchase carbon offsets?



## Regional Mission-linked Offsets

iCAP Chapter 8

Offsets

Objective #3

FY18, Regional  
mission-linked carbon  
offsets

- **Campus Point Person :**
  - iSEE, Ben McCall
- **Current Status:**
  - Pending
  - Could be included in Resilience discussions with community stakeholders
- **Key and Related Metrics:**
  - Yes or No – Are there regional mission-linked carbon offsets?

## Offsets for iCAP Targets

### iCAP Chapter 8

#### Offsets

#### Objective #4

FY20, utilize offsets to meet all iCAP emissions targets

- **Campus Point Person :**
  - iSEE, Ben McCall
- **Current Status:**
  - **Wait until FY20**
    - ✦ Goal is to meet all targets; this is a backstop
- **Key and Related Metrics:**
  - **Yes or No – Did campus use offsets to meet lagging FY20 iCAP emissions targets? If so, how many?**

## Funding Criteria

### iCAP Chapter 9

#### Finances

#### Objective #1

FY16, Develop criteria and a review process for iWG to allocate funding for feasibility studies

- **Campus Point Person :**
  - iSEE, Ben McCall
- **Current Status:**
  - iCAP Working Group developed criteria for prioritizing feasibility studies recommended by SWATeams
    - ✦ <https://icap.sustainability.illinois.edu/project-update/criteria-developed-prioritizing-feasibility-studies-recommended-swateams>
- **Key and Related Metrics:**
  - Yes or No – Was criteria established for allocating funding? - Yes

## Increase Funding

### iCAP Chapter 9

#### Finances

#### Objective #2

FY16, Increase the size of the Revolving Loan Fund and increase the use of Energy Performance Contracting.

- **Campus Point Person :**
  - iSEE and F&S
- **Current Status:**
  - Pending
  - FY16 setback with budget cuts
  - iSEE suggested connecting the RLF to investors, both internal and external
- **Key and Related Metrics:**
  - Size of RLF, compared to FY15
    - ✦ \$750K more added in FY16
  - Funding for EPC, compared to FY15

## Funding w/o Payback

### iCAP Chapter 9

#### Finances

#### Objective #3

By the end of FY16, identify the amount of funds that are available across campus for projects that do not offer a rapid financial payback, but which are nevertheless important for improving campus sustainability, and identify options to increase that amount annually.

- **Campus Point Person :**
  - iSEE, Ben McCall
- **Current Status:**
  - Pending
  - Need to specify the funds to include in this evaluation
    - ✦ SSC, donor funds, Bike Fee, Carbon Credit revenues, etc.
- **Key and Related Metrics:**
  - Yes or No – Were funds identified for projects that do not offer a rapid payback? - No
  - Amount of funding by FY

# Low Payback Funding- Tasks

## Chevy Funding Allocations

- Task Owner: iSEE and F&S
- Status: ongoing
  - RLF \$750,000
  - Biomass Boiler \$200,000

## Sale of Carbon Credits from FY15

- Task Owner: Ben McCall
- Status: in progress
  - Sale completed
  - MOU signed
  - Approximately \$800K available in fund

## Identify Existing Funds Available

- Task Owner: iSEE
- Status: pending
  - SSC, donor funds, Bike Fee, Carbon Credit revenues, etc.

## Price on Carbon

iCAP Chapter 9

Finances

Objective #4

FY16, Evaluate the feasibility of internally putting a price on carbon emissions.

- **Campus Point Person :**
  - **iSEE, Ben McCall**
- **Current Status:**
  - **Pending**
- **Key and Related Metrics:**
  - **Yes or No – Was an evaluation completed? - No**

## SEE Minor

iCAP Chapter 10

Curriculum

Objective #1

Offer an undergraduate minor in sustainability starting with approximately 20 students in FY16

- **Campus Point Person :**
  - iSEE, Madhu Khanna
- **Current Status:**
  - Launched Nov. 22
  - <http://sustainability.illinois.edu/education/sustainability-minor/>
- **Key and Related Metrics:**
  - # of students enrolled per semester – 29 students in Minor for AY 15-16



## Project Based Learning

iCAP Chapter 10

Curriculum

Objective #2

Offer opportunities for undergraduate students to obtain research and practical experience by participating in independent study projects on topics in sustainability.

- **Campus Point Person :**
  - iSEE, Madhu Khanna
- **Current Status:**
  - In progress
  - CEE 398 PBL
  - ENVS 491
  - Student projects
- **Key and Related Metrics:**
  - # of students enrolled in CEE 398
  - # of projects?

## New Classes

iCAP Chapter 10

Curriculum

Objective #3

Add at least five new sustainability-focused courses by FY20.

- **Campus Point Person :**
  - iSEE, Madhu Khanna
- **Current Status:**
  - In progress
  - Ben added one class (ENVS 491)
  - One added in Recreation/DIA (RST)
  - Madhu added one course (ENVS 301)
  - Capstone ENVS 492 [Fall 2017?]
- **Key and Related Metrics:**
  - # of new sustainability-focused courses per year

## Support Student Programs

iCAP Chapter 11

Outreach

Objective #1

Support and communicate about co-curricular student sustainability programs.

- **Campus Point Person :**
  - iSEE
- **Current Status:**
  - Ongoing
  - Ex: Green Apple Day of Service
  - Ex: World Water Day
  - Ex: SSLC, SSC
  - Ex: ActGreen summit, Environ. Expo
- **Key and Related Metrics:**
  - # of programs per year?
  - # of attendees at events?
  - Connect to metrics from STARS credits...

## Strengthen Outreach (& Inreach)

iCAP Chapter 11

Outreach

Objective #2

Strengthen and communicate about sustainability outreach programs, with half of full-time staff participating in Certified Green Office Program by FY20.

- **Campus Point Person :**
  - iSEE, Madhu Khanna & Ben McCall
- **Current Status:**
  - Ongoing
  - Ex: CGOP
- **Key and Related Metrics:**
  - % of full-time staff participating in CGOP per year
  - # of programs?
  - # of attendees at programs?

## Major Events

### iCAP Chapter 11

#### Outreach

#### Objective #3

Organize and promote three major sustainability events on campus each year: Earth Week, Campus Sustainability Week, and the iSEE Congress

- **Campus Point Person :**
  - iSEE, Madhu Khanna
- **Current Status:**
  - Ongoing
  - Earth Week – in collaboration with SECS
  - Campus Sustainability Week
  - iSEE Congress
- **Key and Related Metrics:**
  - # of attendees at programs?
  - Cost efficiency (per attendee)

## iSEE Website

### iCAP Chapter 12

#### Research

#### Objective #1

Create a hub for the sustainability community: to develop a comprehensive online gateway about sustainability research, education, outreach, initiatives, and operations.

- **Campus Point Person :**
  - iSEE, Tony Mancuso
- **Current Status:**
  - Ongoing
  - Need to add an Outreach section to iSEE's website for resilience, etc.
- **Key and Related Metrics:**
  - # of website visitors
    - ✦ iSEE website
    - ✦ iCAP Portal
  - # of Portal projects?
  - Video views
  - Social media

## Scholars Program

iCAP Chapter 12

Research

Objective #2

Build connections: to bring together scholars from across campus to encourage collaboration, and to enhance research endeavors.

- **Campus Point Person :**
  - iSEE, Evan DeLucia
- **Current Status:**
  - **Started**
    - ✦ Water Scholars
    - ✦ Energy Scholars
- **Key and Related Metrics:**
  - # of participating scholars
  - # of networking events?

## Launch Thematic Research

iCAP Chapter 12

Research

Objective #3

Foster “actionable” research: that provides real-world solutions to society’s grand challenges in sustainability, energy and the environment.

- **Campus Point Person :**
  - iSEE, Evan DeLucia
- **Current Status:**
  - In Progress
- **Key and Related Metrics:**
  - # of research programs funded
  - Seed money distributed
  - External funding awarded



## [Key topic]

iCAP Chapter [#]

[Chapter Name]

Objective #[#]

[Objective as written in  
iCAP]

- **Campus Owner:**
  - [Name]
- **Current Status: [Overall Status]**
  - [Note 1]
  - [Note 2]
- **Key and Related Metrics:**
  - [Metric 1]
  - [Metric 2]
    - ✦ [sub-metric 1]

## [Key topic]

iCAP Chapter [#]

[Chapter Name]

Objective #[#]

[Objective as written in  
iCAP]

- **Campus Owner:**
  - [Name]
- **Current Status: [Overall Status]**
  - [Note 1]
  - [Note 2]
- **Key and Related Metrics:**
  - [Metric 1]
  - [Metric 2]
    - ✦ [sub-metric 1]

# [Key Words] - Tasks

## [Task 1]

- Task Owner: [Name]
- Status: [general status]
  - [Note 1]
  - [Note 2]

## [Task 3]

- Task Owner: [Name]
- Status: [general status]
  - [Note 1]
  - [Note 2]

## [Task 2]

- Task Owner: [Name]
- Status: [general status]
  - [Note 1]
  - [Note 2]