

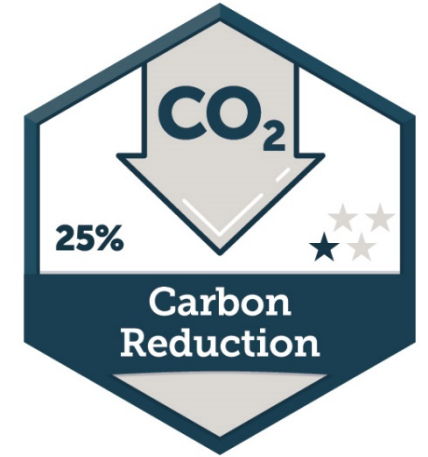
Ithaca College Path to Carbon Neutrality



You Can Get There From Here

NYAPPA / SUNY PPAA

GREG LISCHKE, July 17, 2019



Greg Lischke – Visual CV



WAKE FOREST
UNIVERSITY



Course Details

Subject Description: Share one campus journey to carbon neutrality, and discuss the varied issues and opportunities along the way.

Course Description / Learning Objectives: Discuss the following topics relevant to environmental reporting and carbon accounting:

1. Three scope emissions
2. Carbon accounting methodology
3. Seeking and engaging community and professional support
4. Strategies to mitigate / eliminate carbon emissions

Requesting 1.0 Professional Development Hours

Course Outline:

1. Introduction
2. Learning Objectives
3. Review Scope Emissions / Buckets of Carbon
4. Ithaca College Snapshot
5. Discuss community and professional support
6. Review carbon mitigation strategies
7. Group Learning Assessment
8. Open Discussion / Conclusion

Learning Objectives

1. Scope Emissions – Buckets of Carbon
2. Carbon Accounting Methodology
3. Engaging Community and Seeking Support
4. Strategies to Eliminate / Minimize Carbon

PE Course #20190562, 1 Hour
AIA Course #ER0308, 1 LU



Scope Emissions – Buckets of Carbon

Scope 1 Stationary Sources



Boilers, Fleet Vehicles, Refrigeration losses, Fertilizer, Animals

Scope Emissions – Buckets of Carbon

Scope 2 - Electricity



Utility grid system purchases, Renewable Energy, RECs

Scope Emissions – Buckets of Carbon

Scope 3 – Other Indirect



Commuting Miles, Business Travel, Other Directly Financed Travel

Scope Emissions – Buckets of Carbon

Mitigation



Ithaca College Natural Lands

Total distance: 6.91 miles

Difficulty level(s): easy, moderate



Sequestration, Composting, Purchase Offsets

Carbon Accounting Methodologies

IPCC

American Carbon Registry

SIMAP / Campus Carbon Calc / Clean Air Cool Planet

EU Renewable Energy Directive

Clean Development Mechanism

Voluntary Carbon Standard



Ithaca College Emissions (Second Nature)

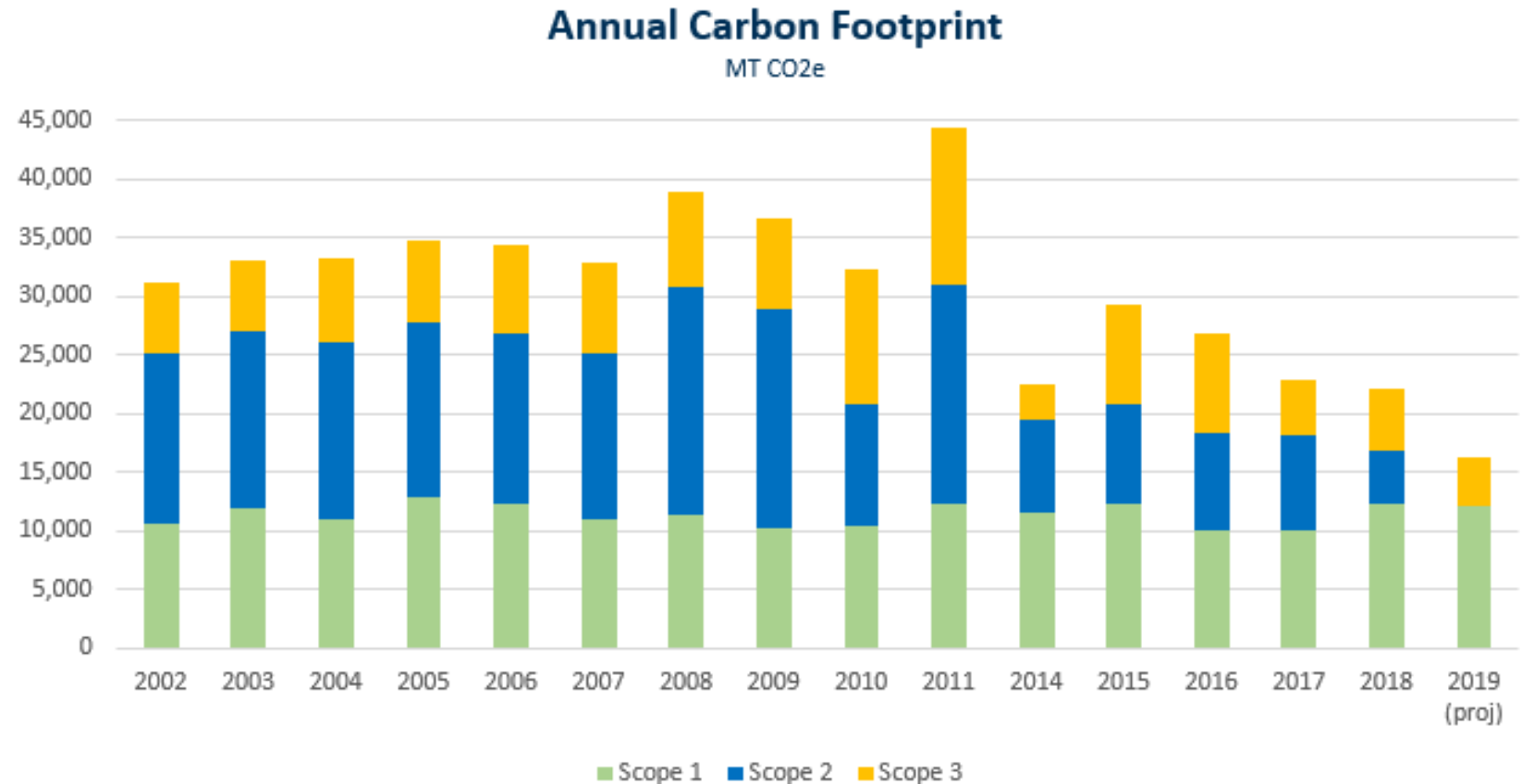
Scope 1 – Stationary Sources



Scope 2 - Electricity



Scope 3 – Other Indirect



Community & Professional Support

Community organizations

Park Foundation, TCCPI, Sustainable Tompkins, Cornell University, Finger Lakes Climate Fund, Get Your Green Back, Cornell Cooperative Extension, Tompkins County Area Development

Higher Ed / Professional Organizations

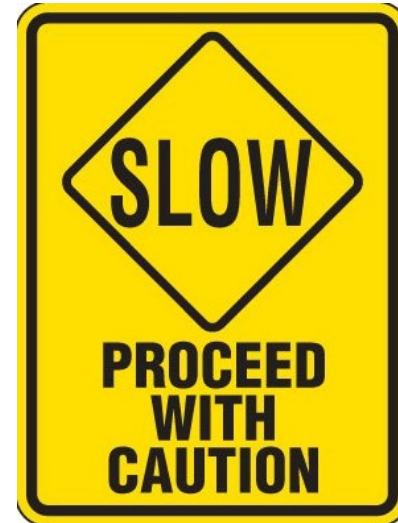
NYCSHE, NYAPPA / SUNY PPAA, ERAPPA, APPA, Large Scale Renewable Energy, NACUBO, AASHE, Second Nature, ...

Elected officials

State Senators, Mayor, Council Members, Representatives

Regional & State Policy

Town of Ithaca Green Building Policy
City Ithaca Green New Deal



Community & Professional Support

Local architect, engineering, and consulting firms

O'Brien & Gere / Ramboll

GreenerU

C&S Companies

M/E Engineering

Holt Architects

Ecosystem Energy

Murphy Engineering

Incentive Programs

NYSERDA Clean Geothermal Challenge

C&I Carbon Challenge Grant

NY SUN

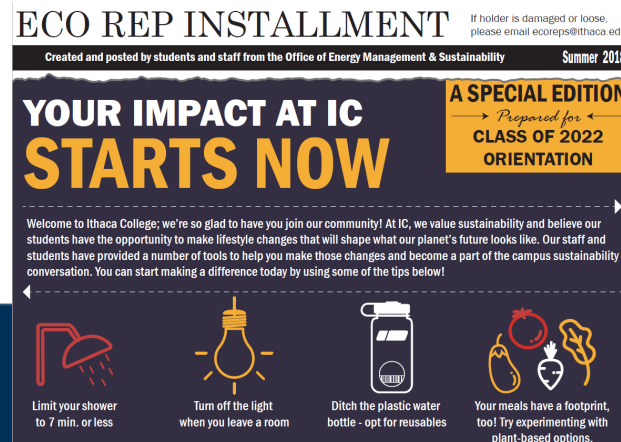
Local Utility Programs



Carbon Elimination & Mitigation

Scope 1

- + Bio Fuels
- + Effective Temperature Setback Programs
- + Building Envelope Improvements
- + Electric Fleet Vehicles
- + Geothermal
- + Heat Recovery
- + Electric Boilers & Heaters
- + Effective Metering System
- + Departmental Cost Accounting
- + Create Awareness via Engaged Community
- + Green Fund
- + Retro Commissioning



Carbon Elimination & Mitigation

Scope 2

- + On Site, Behind Meter Renewable
- + Green-e certified supply agreements
- + RECs – many flavors
- + Effective Metering System
- + Departmental Cost Accounting
- + Upgrade Lighting
- + Occupancy Sensors
- + Daylighting
- + Scheduling System



Carbon Elimination & Mitigation

Scope 3

- + Virtual Conferences
- + Virtual Meetings – Web Ex, Skype, etc...
- + Public Transportation Incentives
- + Campus Shuttle
- + Parking Fee Structure
- + Travel Offsets
- + Carbon Tax (virtual or real)



Learning Outcome Review

1. Name the three buckets of carbon?
2. How can you track your carbon footprint?
3. Name three potential sources for support during your journey?
4. Share one story on how you have or could reduce your Scope 1 emissions on your campus?
5. Share one story on how you have or could reduce your Scope 3 emissions on your campus?

Office of Energy Management & Sustainability



Energy
Management



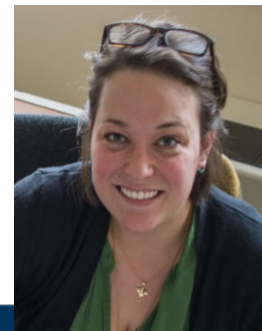
Sustainability



Student, Faculty,
& Community
Engagement



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