



# Green Labs Program Overview

Northwestern is committed to being a leader in sustainability. As a premier research institution, Northwestern operates over 600 labs. The average lab uses 5 to 10 times the amount of energy and water per square foot compared to a typical office.<sup>1</sup> Labs also generate large amounts of chemical, physical, and hazardous waste. Lab personnel have an essential role to play in reducing the University's environmental footprint.

The Green Labs Program catalyzes labs to adopt more sustainable practices. This voluntary certification engages campus partners to expand on best practices in sustainable operations without sacrificing research quality or safety. If you are interested in becoming a Green Lab, please follow the steps below.

## The Certification Process

### 1. Contact sustainNU

sustainNU will hold an introductory meeting to review the certification benefits and process.

### 2. Get approval

Laboratory leadership should be informed and provide approval before proceeding with certification.

### 3. Schedule a walkthrough of the lab space

A walkthrough with the lab and sustainNU helps to identify opportunities through the Green Labs Assessment Form.

### 4. Assign a green labs leader and/or team

The lab must have an active Green Labs leader and, if possible, a team of 2+ members who communicate and lead green initiatives with your lab through sustainNU.

### 5. Host a staff presentation

The lab must participate in the Green Labs presentation given by sustainNU. The Lab Member Participation Form will be submitted to document this.

### 6. Check in with sustainNU

Update sustainNU on the status of your certification process, share a target completion date, and receive support during a mid-certification touch base.

### 7. Complete the Green Labs Certification Guide

Complete at least 75% of applicable sustainability practices in the Green Labs Certification Guide.

### 8. Receive Certification

Plan a Green Labs celebration and presentation of your certification materials.

## Ongoing: Maintain engagement in lab sustainability

Maintain an active green leader and/or team and continue the sustainability practices implemented through this program.

**Contact [sustainNU@northwestern.edu](mailto:sustainNU@northwestern.edu) to get started today!**

<sup>1</sup> US Environmental Protection Agency and US Department of Energy. "Laboratories for the 21st Century: An Introduction to Low-Energy Design" (2008). Retrieved from [nrel.gov/docs/fy08osti/29413.pdf](http://nrel.gov/docs/fy08osti/29413.pdf)

# Preview of Green Lab Practices

To receive Green Labs Certification, your lab must implement at least 75% of the actions that apply to your work environment. We understand that some actions may not be applicable to all labs. Please use the Green Labs Certification Guide to note which actions are applicable to you and document your progress. If you have any questions, contact sustainNU at [sustainNU@northwestern.edu](mailto:sustainNU@northwestern.edu).

## Energy Conservation and Efficiency

### Equipment Shut Down

1. We turn applicable equipment off at the end of the day and place a shutdown checklist in a visible location.

### Fume Hoods

2. We have a fume hood policy that encourages lab members to shut the sash when not in use.
3. We have "shut the sash" reminder stickers posted on the fume hood.
4. We contact Facilities to report malfunctioning or no longer used fume hoods.

### Freezers

5. We keep an inventory of items in our freezer.
6. We host annual freezer clean outs.
7. We remove ice buildup and clean the freezer filter every other month.
8. We raise in all ULT freezers from -80 to -70 Celsius.
9. We share freezer space with another lab.
10. We store our freezers in well ventilated locations.
11. We have freezers inspected if we suspect inefficiencies.

### Lighting

12. We maximize the use of natural and task lighting instead of overhead lights.
13. We turn off lights and place reminder stickers on switches.

### Computers and Other Electronics

14. We use Research Safety approved smart power strips to reduce standby power usage.
15. We use energy efficient settings for computers, printers, copiers, and other devices.

### Climate Control

16. We follow Facilities policies restricting space heaters use and report temperature issues.
17. We keep windows closed when heating or air conditioning is running.

## Water Conservation and Efficiency

18. We report water leaks to Facilities.
19. We turn off water fixtures when not in use.
20. We follow Research Safety guidelines for hazardous waste disposal.
21. We follow best practices for autoclave use.
22. We review our rinsing procedures regularly.

## Materials Management

### Paper and Office Supplies

23. We save paper by distributing materials electronically and using double-sided printing.
24. We reuse scrap paper and office supplies.

### Recycling

25. We encourage recycling by ensuring proper placement and labeling of bins.
26. We recycle electronic waste through the Northwestern eCycling program.

### Chemical Use and Disposal

27. We follow guidelines for hazardous waste minimization and disposal set by Research Safety.
28. We apply the Hierarchy of Controls model.
29. We avoid purchasing unnecessarily hazardous materials.
30. We make surplus chemicals that meet Research Safety requirements available to other labs for use.

### Green Purchasing

31. We keep a detailed inventory of lab supplies.
32. We follow sustainable purchasing practices when considering and making purchases.
33. We explore alternatives before purchasing new products.
34. We factor sustainability into our grant requests.

## Communications and Engagement

35. We have an active Green Labs team.
36. We include information on lab sustainability practices in lab orientation.
37. Like safety, we discuss sustainability during lab meetings by making it part of the standing agenda.

## Social Sustainability

### Lab Culture

38. We encourage low-carbon modes of transportation for lab members.
39. We encourage staff to take advantage of health and wellness programs offered through HR.

### Environmental Justice

40. We encourage lab members to review environmental justice and anti-racism resources.
41. We encourage lab members to learn about the Indigenous Peoples native to the land on which NU sits.