

SUSTAINABLE LAB CHECKLIST

This checklist can be used to improve the sustainability of your laboratory. Use any or all applicable strategies.

Category		✓
Recycling and Waste Reduction		
Zero Waste Hierarchy	Create a list of lab items that are typically recycled or thrown away. Can any be avoided, reduced, or reused?	
Traditional Recycling	Locate the closest collection points for plastic, paper, glass, cardboard and aluminum. If collection is to be done within the lab, who is responsible for getting these materials to the collection point?	
Lab Plastics	Source pipette tip systems with reusable and recyclable pieces	
	Use manufacturer recycling programs for otherwise unrecyclable lab plastics	
	Reuse or donate pipette tip boxes	
Used Computers and Electronics	Use VU Electronics Recycling Program for all used electronics	
Paper Reduction	Use electronic document generation, sharing, and saving systems	
	When printing is necessary, use 2-sided and narrow margin settings	
Ink/Toner Cartridges	Recycle ink/toner cartridges	
Small Used Batteries	Recycle small batteries	
Chemical Use Minimization	Find less hazardous alternates for hazardous chemicals used in your lab.	
	Make a list of chemicals in your lab that do not have an ACT label and find alternatives.	
	Avoid the use of the EPA 31 Priority Chemicals in your lab	
	Reduce the quantity of hazardous chemicals used (scale down experiment)	
	Dispose of harmful chemicals safely	
	Only purchase the chemicals you need in the quantity needed	
	Utilize the Chemical Redistribution Program for unwanted chemicals in your lab	
	Follow manufacturer's recommended storage guidelines for chemicals to reduce deterioration	
Segregate stored chemicals to avoid premature deterioration due to chemical reactions		
Energy Efficiency and Conservation		
Fume Hoods	Close the sash on fume hoods when not in use	
	Keep fume hood fans on lowest setting possible for your experimental and safety requirements	
	Consider sharing fume hoods with another lab	
Refrigerators and Freezers	Make a schematic to organize your cold samples	
	Use refrigerator/freezer space efficiently	
	Separate equipment designed to run at high temperatures from refrigerators/freezers	
	Create a cleaning schedule and clean refrigerators/freezers regularly	
	Create a seal check schedule and check seals on refrigerator/freezer doors regularly	
	Change -80° freezer temperature to -70°	
	Consider converting samples to room-temp storage: Resource 1 & resource 2	
Replace old freezers with energy efficient new models		
Computers and Related Equipment	Turn on sleep settings for equipment to save energy	

Equipment Use and Maintenance	Make a schedule and do routine maintenance on all equipment	
	Share lab equipment	
	Turn off all equipment when not in use	
Lighting	Establish a protocol for turning off lights in lab at end of day	
	Perform an inventory of laboratory lights and determine a plan to reduce the number of lights turned on inside lab	
	Employ motion sensors in lab space	
Temperature Control	Set thermostat appropriately for season - ~75° for summer and ~68° in winter	
	Keep doors closed whenever possible	
	Close blinds in summer when cooling, open blinds in winter for additional solar heat gain	
	Set thermostat to more efficient temperatures when space is unoccupied	
Green Purchasing		
Laboratory Equipment	Only purchase equipment that is necessary	
	Purchase the most energy-efficient equipment possible (ENERGYSTAR good indicator of efficient models). Pay particular attention to fume hoods and ULT freezers for more energy efficient models.	
	Consider used equipment	
Paper & Printing Supplies	Choose paper with one or more of the following characteristics:	
	<ul style="list-style-type: none"> • High recycled content 	
	<ul style="list-style-type: none"> • FSC certification 	
	<ul style="list-style-type: none"> • Chlorine free 	
	<ul style="list-style-type: none"> • Made with renewable energy 	
	<ul style="list-style-type: none"> • Printed with environmentally-friendly inks 	
	Purchase remanufactured ink/toner cartridges	
Other Laboratory Supplies	Choose products with the following features:	
	<ul style="list-style-type: none"> • Recycled content 	
	<ul style="list-style-type: none"> • Reduced packaging 	
	<ul style="list-style-type: none"> • Packaging made of recycled material 	
	Choose manufacturers with end-of-life recycling programs	
	Choose lead-free or mercury-free equipment	
Shipping and Packaging	Choose companies that implement more environmentally responsible shipping practices such as:	
	<ul style="list-style-type: none"> • Minimal packaging 	
	<ul style="list-style-type: none"> • Packaging with recycled content 	
Transportation		
Transportation	Choose sustainable transportation options for your commute	
	Reduce lab visits with remote monitoring programs	
	Choose virtual meeting options instead of traveling to conferences/meetings/etc.	
Water Conservation		
Water Conservation	Eliminate water vacuum aspirators and replace them with energy efficient vacuum pumps	
	Only wash full loads of glassware and dishes	
	Only run full autoclave loads	
	Reuse water when you can	
	Report and repair water leaks, broken pipes, and dripping faucets	