



EVERY UTRGV SCIENCE LAB CAN BE A SUSTAINABLE SCIENCE LAB.

Laboratories provide hands-on experiences that are a vital part of the [U.N. Sustainable Development Goal of Quality Education](#). Like UTRGV's [sustainable classrooms and offices](#), the labs' operations should reflect the [UT System's commitment to sustainable development](#).

EXPERIMENT WITH SUSTAINABILITY:

1. Complete the assessment above and submit your results to the [Office for Sustainability](#). Allow us to recognize your efforts!

2. Live by the mantra of "Reduce, Reuse, Recycle." It takes time to build a habit.

3. Become a Sustainable Development Leader! Work closely with OFS towards a completely sustainable lab!



DID YOU KNOW THAT SCIENCE LABS CONSUME MORE ENERGY THAN ANY OTHER UTRGV FACILITY?

I can make small changes to my habits to help our communities in the long run. I encourage lab users to join me in doing their part to help UTRGV meet system-wide utility-reduction goals!

- I make a habit of closing fume hood sashes and turning off biosafety cabinets and other equipment when not in use. Fume hoods that are left open can consume as much energy as 3.5 homes! I always close unused hoods.
- I have changed the settings on my printer to print double-sided, and all other electronics to enter energy-saving modes.

- We share an energy-efficient freezer with neighboring labs. We have a policy for cleaning and maintaining a safe fridge environment, including proper labelling and regular defrosting.
- We raise temperatures of freezers to the highest safe point to save energy. I store samples at room temperature when safely possible.
- I share digital versions of documents and "handouts" instead of printing them for the group. I include an "only print if necessary" message in our email footers.
- I turn off lights when the room is not in use and have reminder signs in rooms that do not automatically turn off. I allow natural lighting to help illuminate the room if possible.
- Our lab uses smart power strips to power down devices that are not being used and to protect against voltage spikes.



LAB RESEARCH ALSO USES A LOT OF WATER - BUT I REDUCE MY USE WHEN POSSIBLE.

Clean water is a limited resource, and the energy needed to purify water for use is also high. I help UTRGV reduce its carbon footprint by saving water.

- It is our lab's policy to save water. I don't let taps run unchecked. I use ice makers, autoclaves, and stills efficiently.

- We've installed water misers on sterilizers and autoclaves.
- We use timers for water valves - set to minimum necessary time.
- We reduce our use of single-pass cooling and switched to closed-loop cooling wherever possible.
- I clean lab supplies sustainably: filling a sink to rinse glass labware, and only washing full loads of lab coats or aprons.
- I use the appropriate water quality for experiments and cleaning.
- I report leaks and dripping faucets to the Campus Facilities Operations department. (I submit service requests via iServiceDesk.)



OUR LAB MAKES SUSTAINABLE PURCHASES.

I use my lab's purchasing power to make a statement! By shopping from companies that make a commitment to sustainability, we support their goals and encourage other suppliers to demonstrate environmental stewardship.

- As much as possible, the chain of production for items I purchase involves processes that are not harmful to people, animals, or the environment. I purchase from companies with a stated goal of reducing their negative environmental and social impacts.
- I follow established inventory management practices that save the lab money and reduce unnecessary waste by avoiding duplicate purchases.

- I purchase electronics that are the right size for our needs and ENERGY STAR/EPEAT certified when applicable.
- I purchase products with reduced toxic or hazardous chemicals, including cleaning supplies.
- I purchase in bulk to reduce wasteful packaging and prefers packaging that is recycled/recyclable.
- I consolidate orders and eliminate purchase orders below \$100. Consolidating orders reduces packaging and reduces the emissions and energy associated with transporting our purchases to campus.
- I purchase and use printer paper that is FCS-Certified or recycled. (I look for the "Green" or "Recycled" icon on iShop.)
- I explore options for reuse of unwanted office items and look for surplus resources instead of purchasing new furniture or electronics.



I REDUCE, REUSE, AND RECYCLE TO CUT DOWN ON WASTE.

Labs generate waste that can be very harmful to the environment if not disposed of properly. I consider the entire life-cycle of substances and materials used in experiments.

- I dispose of chemical waste safely. I do NOT pour waste down the drain unless explicitly instructed to do so. "Only rain down the drain!"

- I recycle traditional recycleables like paper and plastic, and lab recycleables like pipette trays. I use recyclable gloves when possible.
- Good inventory management reduces the amount of out-of-date waste produced by the lab.
- I recycle lab equipment and replace aging equipment with energy-efficient models.
- I contact the department of Environmental, Health, Safety and Risk Management (EHSRM@utrgv.edu) with hazardous waste pickup requests.



AT UTRGV, I PRACTICE SUSTAINABLE LAB HABITS.

I plan the manner in which I conduct lab studies to be as fiscally responsible as possible while minimizing potential harm to people, animals, and the planet.

- I share sustainable lab habits and rules with all lab users and share the message of sustainability whenever possible. For example, I discuss the sustainable aspects of our experiments.
- I do not eat or drink in the lab, but carry a reusable water bottle to stay hydrated while on campus.
- I dress in layers to stay comfortable indoors, because my individual temperature preferences may differ from that of our colleagues.