Sustainability

Sustainable purchasing Laboratory 2024

1. Reduce, reuse and recycle

⊘ Reduce

- Reduce the scale of experiments and protocols to the minimum size necessary to achieve research objectives.
- Maintain an accurate chemical inventory in your laboratory to reduce or eliminate the number of duplicated chemical containers purchased.

⊘ Reuse

- Where possible and safe to do so, use washable or reusable labware in place of disposable items. Whilst some products need to be single-use items for the integrity of the project and for safety, it may be possible to reuse labware after appropriate decontamination and cleaning.
- Rather than buying pipette tips pre-racked, consider refilling your old racks by purchasing your tips in bags.
- If certain equipment is only needed occasionally, is it possible to use existing
 equipment in a neighbouring lab? Have a look on the University's WarpIt site before
 buying new. If lab equipment and consumables are unwanted, upload them onto
 WarpIt to see if another staff member can make use of them.



⊘ Recycle

 Set up a convenient recycling facility outside your lab. Clean, uncontaminated plastic, glass, paper, cardboard and polystyrene can be recycled. For Office of the Gene Technology Regulator (OGTR) facilities and Quarantine Approved Premises, outer packaging materials that have not entered the lab can be recycled.

2. Buy sustainable

Wherever possible CHOOSE products that employ a combination of characteristics listed below.

⊘ Choose energy efficient equipment

For most equipment, energy consumption is likely to be the most significant environmental impact and will be a very significant component of whole life cost.

Compare energy efficiency and running costs of equipment using either the **Energy Star Rating** or **Energy Star certification**.











⊘ Choose products with independent certifications

Labels to look out for include:

ACT Label – provides an environmental impact factor assessment of laboratory consumables, chemicals, and equipment, rating each product's manufacturing, user, and end-of-life impact, including energy and water use, chemical management, packaging, and shipping. The lower the score, the lower the impact on the environment

Energy Star certification – identifies the most energy efficient equipment. The more stars on the Energy Rating Label, the more energy efficient the appliance is.

Epeat Registry – The Electronic Product Environmental Assessment Tool (EPEAT) is a global ecolabel for electronic and technology products.

Green Lab Supplies and Lab Equipment Guide by Labconscious assist you find eco-friendly laboratory equipment and lab consumables.

Choose lab consumables made of recycled materials

Look for items made with recycled plastics. Test tube racks and conical tubes are two supplies that are often made with materials that have been recycled.

⊘ Choose products with reduced and/or recycled content packaging

The production of packaging products utilises significant resources and generates environmental impacts.

As a minimum the products procured should have:

- recyclable packaging
- packaging material that contains a high percentage recycled content
- reduced volume of packaging
- buy bulk packaged items when possible

Consider giving preference to products that have end-of-life take-back programs for packaging and equipment. If no options are available, start a dialogue with suppliers encouraging them to provide such programs.

✓ Choose chemicals that are less hazardous

Eliminating hazardous chemicals or substituting for less hazardous materials will reduce the environmental impact of your experiments. Check out **My Green Lab**, **Green Chemistry** webpage for resources on chemical substitutions.





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	The Environmental
	Impact Factor Label











Use the Where to buy guide (UQ login required) for information on how to purchase lab equipment and consumables.

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