



Lower Carbon



Minimal Waste



Biodiverse
Campuses



Sustainable
Travel



Positive
Procurement



Wellbeing
and Health



Culture and
Community



Knowledge
and Skills

Sustainable Labs



Swansea University
Prifysgol Abertawe

Sustainability
Cynaliadwyedd

How can I reduce the impact of the equipment I have in the lab? **Cold storage**

Cold storage is essential in a lot of our laboratories and can use a lot of energy. However, there are some simple things we can do to be more efficient and reduce our impact on the environment.



Before you buy:

- Understand what temperatures you need for your work, could you use a -40°C instead of a -80°C ?
- Check out the energy efficiency rating of the products to reduce lifetime costs
- Understand any regular maintenance required and how this will be undertaken

During operation:

- Regular checks of ice build-up, filters, ambient operating temperature and local procedures of how to respond/manage these
- Samples have been proven to be stored safely at -70°C instead of -80°C , this saves approximately £300 a year per ULT freezer in electricity
- Label samples so storage space can be cleared as people leave the University
- Defrost periodically to ensure cold storage runs efficiently
- Use alarm systems to prevent samples being lost when there is a breakdown

When disposing:

- Dispose of Waste Electrical and Electronic Equipment in accordance with the Waste Management Guidance Note ([WMGN17](#))

Contact your local Environment Officer for more information:

- sustainability@swansea.ac.uk

SwanseaSWell



swansea.ac.uk/sustainability



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