#### The Laboratory Efficiency Assessment Framework @ Exeter



# **SUSTAINABILITY IS EVERYBODY'S** RESPONSIBILITY

Research laboratories need large amounts of energy and resources to operate and generate an enormous amount of waste. Reducing the impact of our labs will result in a big impact on the sustainability of the whole University. Here are six simple steps towards sustainable labs:



## **Properly manage** cold storage

• Keep fridge and freezer contents organised and clear out old samples and chemicals on a regular basis to reduce the need of additional cold storage • Don't leave the fridge or freezer door open for longer than necessary

• Look after your fridges and freezers, report promptly any issues like dirty filters, heavy icing or broken seals · Don't store items on top of fridges and freezers, it reduces the air circulation and efficiency

• Keep them clean (including dusting fridge condenser coils and vacuuming freezer filters) to reduce their energy consumption

• Consider operating ULT freezers at the highest possible temperature for safe sample storage

2

### Pull the fume hood sashes all the way down when not in use

• When a fume hood is not in use, its sash should be closed to conserve energy • Shutting a VAV fume hood sash reduces energy consumption and carbon emissions by 40%



4

### Manage chemicals and utilise green chemistry techniques

- Plan your work so that you use the minimum amount of chemicals
- Where possible, substitute out hazardous chemicals for less harmful alternatives
- Check for already available chemicals before ordering more
- Only order what you need to avoid waste; don't be tempted by the discounted prices of bulk buying
- Offer unwanted or excess chemicals to other lab users
- Make sure chemicals are disposed of correctly
  - Manage waste and 5 reduce, reuse, recycle
- Reject unsustainable products (include packaging methods in your criteria)
- Minimise accumulation of excess products
- · Look for alternatives to single-use plastic within your lab work
- Always look for opportunities to reuse/repurpose
- Engage with any available 'send back' schemes
- Recycle non-hazardous waste (paper and packaging)
- · Where possible, decontaminate materials such as glass and plastic so they can be reused or recycled
- · Do not mix waste streams and dispose of your waste



- Don't purchase new kit if you can borrow it from elsewhere. Sharing equipment saves money and helps use space efficiently
- Use initiatives to share unwanted equipment
- When purchasing new equipment include energy efficiency in your selection criteria

#### via the correct waste stream



· Last one out – turn off the lights! • Turn off equipment where possible and safe to do so. Particularly at nights and weekends



Scan to learn more about lab sustainability at the University of Exeter

Any questions? Contact LEAF@exeter.ac.uk

LEAF / Lab Sustainability Team: Daniela FARINA & Jenny LORD

