



Achieving Gold

Author	Role	Version	Issue date
Jenna Lowe	Laboratory Sustainability Officer	1.0	January 2024

Section	Title
1	Purpose
2	Scope
3	Procedure
3.1	Waste
3.2	People
3.3	Purchasing
3.4	Equipment
3.5	IT
3.6	Sample and Chemical Management
3.7	Research Quality
3.8	Ventilation
3.9	Water
3.10	Teaching
4	Changes to the procedure

1. Purpose

The purpose of this document is to provide guidance on answering the questions in the LEAF gold award criteria. Each section of this document explains what should be considered when answering the questions. If any questions are not suitable for your area than 'Not applicable' along with an explanation can be written in the answer box. Any sustainable activities carried out in your area that are not captured by the framework can be captured in the 'Open Initiatives' section at the end of the questions.

2. Scope

This guide is for laboratory users who have been nominated to carry out LEAF in their area and are filling out the criteria for the gold award.

3. Procedure

3.1. Waste (Q34)

 The laboratory has implemented some form of reuse of materials – explain what this is and how this will have reduced the amount of waste produced. Ideally the LEAF calculators should be used to record this reduction.

3.2. People (Q35 and Q48)

- The laboratory has implemented at least one action to reduce travel environmental impacts of travel have been considered and minimised where feasible. – this is not about commuting.
- Sustainability in corresponding office spaces has been assessed.

1 Version 1.0





3.3. Equipment (Q36-38)

- LED's are used for illumination purposes and there is a plan in place to replace lights with LED alternatives i.e. in microscopy.
- Excess equipment and consumables are repaired/shared/donated or sold such as offering
 out to other laboratories or using <u>UniGreen Scheme</u>.
- Where water is used for cooling it is recirculated tap to drain/single pass through cooling water is not used where this regularly leads to large volumes of water wastage.

3.4. IT (Q39)

• Computing code and the number of storage clusters have been optimised – **this only applies to labs with significant data storage.**

3.5. Sample and Chemical management (Q40-41 and Q47)

- Existing data or samples can be used instead of sourcing new samples **sharing of existing** samples, chemicals, materials and/or data
- 85% of chemicals are being used or are stored and easily identifiable there is evidence of organization of chemicals. Explain how samples and chemicals are managed.
- No solvents are being evaporated to the atmosphere, solvent selection has been considered
 for greenness and where feasible solvent recapture/recycling is assessed. Any vapour from
 solvent evaporation is captured and not released. Where feasible captured solvents are
 reused.
- A chemical inventory should be present and all unused chemicals disposed of suggest the use of the dot method to identify unused chemicals.

3.6. Research quality (Q42-43)

- A lab management system is used where required Lab management systems can include SafetyNet or similar for access to COSHH, RA and SOPs/sample databases where required/Chemical inventories/SharePoint or Teams site for lab groups to store protocols/results.
- Sterilisation and cleanliness methods have been reviewed for efficiencies and effectiveness.
 Do items need to be sterilised or can the number of items sent for sterilisation be reduced.
 Have you assessed the chemicals used in lab cleaning and is there a rota in place?

3.7. Ventilation (Q44)

- Where possible fume hood rates and/or air change rates are lowered.
- Have unnecessary extracts from safety cabinets been removed to become recirculating?

3.8. Water (Q45)

• Is guidance provided on the use of drains and effluent waste to all lab users at induction and beyond?

2 Version 1.0





3.9. Teaching (Q46)

Environmental impacts have been reduced through the design and revision of experimental
procedures for taught laboratory courses. Where there is no teaching write "no teaching".
 Evidence that teaching experiments have been revised or redesigned to include
sustainable practises.

4. Changes to the procedure

Version	Reason for change	Date

Version 1.0