

# How to stay ahead of the mercury bulb phase-out

Lessons from the University of Aberdeen  
Microscopy and Histology Core Facility



## 1. The Challenge

Older fluorescence microscopes may still rely on mercury or metal halide lamps, but availability, cost, safety and sustainability pressures are making LED upgrades increasingly important.

“Stockpiling mercury bulbs was discussed, but it never felt like a sustainable approach”

Dr. Debbie Wilkinson

## 2. The Facility's route to going mercury-free



2022

Mercury restrictions identified



2025

Guidance and LED options explored



Feb 2026

Business Case Developed to transition



April 2026

Funding approved and order placed



June 2026

LED Systems installed in facility



LED Illumination Systems Installed: two CoolLED pE-300<sup>lite</sup> and one pE-400

## 3. How they justified the expenditure

### Cost

Mercury and metal halide systems can cost thousands more to run over time, once replacement bulbs, engineer visits, downtime, staff time and disruption are taken into account

### Sustainability

Mercury-free LED illumination can help facilities reduce hazardous waste, lower energy use and support wider institutional sustainability goals with a more future-ready approach

### Health & Safety

Moving away from mercury helps reduce staff exposure, simplify handling and disposal, and ease the administrative burden of managing hazardous consumables safely

## 4. What can you do now?

Get in touch with CoolLED about your transition

Identify systems still using mercury/metal halide

Gather evidence on costs, downtime, safety & waste

Explore internal sustainability or funding routes

Build a clear business case before lamp availability becomes a problem



## Planning your own move away from mercury and metal halide bulbs?

Explore CoolLED's No More Mercury resources for guidance on mercury restrictions and interactive tools, LED illumination options and practical considerations for fluorescence microscopy facilities.



[cooled.com/no-more-mercury](https://cooled.com/no-more-mercury)



Read the full Case Study Here

