

GREEN CHAMPIONS

ACHIEVING EFLM GREEN LABS ACCREDITATION

The NHS has promised to reach net zero for the emissions it controls by 2040. That's 14 years away. Furthermore, it has pledged an 80% reduction by 2032, which is six years away. My youngest child is six, and it feels like the blink of an eye since he was born. I want to help the NHS achieve this goal so my son grows up in a world with an abundance of the insects he loves.

To that end I have appointed myself sustainability champion in the Blood Sciences Laboratory at the Royal Marsden Hospital (RMH). I have so far set up a green forum for them, and for all the labs across the RMH site, so that we can share ideas and sustainable initiatives. I gave a CPD talk on this topic to the whole of pathology and signed us up to the International Freezer Challenge. It was, and continues to be, a challenge to put myself out there and stand up for my values but it is worth it.

One of the initiatives we decided to implement was to find a green labs accreditation scheme we could sign up to. Our main analyser manufacturer, QuidelOrtho, agreed to fund us if we could find the right scheme, so I completed an options appraisal to select this. We chose the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) green labs accreditation.

The first thing I did was download the EFLM green labs checklist PDF, which is free to access. It is 15 pages of tick boxes like this, so it is pretty extensive:



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Checklist - Hazardous Chemicals Management						
n.	ACTION	Always OR already completed	Sometimes OR in progress	No OR Rarely; (agree to be regular within 3 months)	No plans to start within the next year	Not applicable
GENERAL						
1	Has your lab received higher management support to introduce sustainable practices?	✓				

These were split into four categories: hazardous chemicals management, energy management, waste management and water management. Most of the questions were easy to answer, but there were a few that

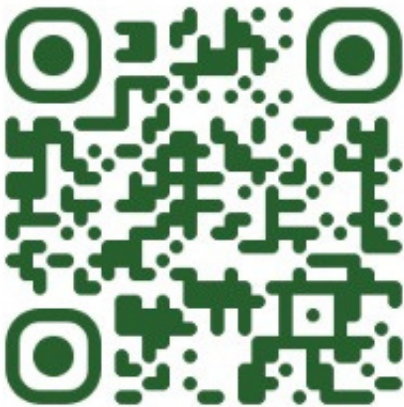
I needed more detail on. I spent time emailing estates about the way our energy is generated and how much it costs, I asked our cleaning contractor about the cleaning chemicals they use and our transport coordinator about switching to electric vehicles. It turns out all the electricity used onsite at RMH is generated from our own CHP (combined heat and power), or from a renewable source during downtime, which was heartening. The CHP also supplies our heating system. The cleaning chemicals are being switched to eco-alternatives slowly and transport have a plan to replace all their vehicles with electric on a rolling basis.

We are a small laboratory, on three sites, and I answered the questions on the basis of all three labs together. We don't run any ultra-low temperature freezers, autoclaves or water-cooled equipment so I answered those as 'already completed' if a 'not applicable' option was not available. This was necessary, as otherwise we did not meet the required 75% success criteria for each section. I am aware that the checklist is being updated currently, so these questions will have an N/A option soon. Once I was satisfied that I had answered all the questions on the PDF, I registered the laboratory on the [EFLM website](#).

This took me to a form to fill in details on the size and workforce within the lab and a page for each section of the checklist. Each question has a drop-down box to answer, but this did not take long since I had already answered them all on the PDF. To move on to the next section a photo detailing one of the questions we answered as 'always or already completed' was uploaded. You could also add notes on any answers that were ticked in the right-hand columns e.g. no plans to start in the next year.



One of my photos was of the flask (above) which is now filled with 'bath beads' instead of water and is given out to wards who request a cryoglobulin screen. It is kept in the incubator when not in use. The beads keep the temperature at 37°C for longer than water, are less likely to become contaminated (and can be sterilised) and makes the flask easier and safer for the ward staff to use. I uploaded this photo for question 10 in water management:



10	Do you use a waterless water bath or a bead bath as an alternative to a traditional water bath to reduce water use, energy use and bacteria growth?
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Once all four sections have been completed, you are immediately told whether you have achieved the 75% success criteria. If not, you have three months to improve before you can apply again. If you have achieved this, you are informed that you will receive an email outcome very soon. They check your notes and photos and then if successful you are asked to pay through a secure portal. We paid and then received confirmation of accreditation that day, along with our certificate.

This is valid for two years and is proudly displayed in the lab. All in all, the process took a few months due to all the communication required, but the actual form completion took an hour or so once the data was gathered. The EFLM say that random audits will be carried out in some laboratories. I'm now looking forward to trying to improve those areas that the checklist has made me think about in more detail – it's a great tool if you want to make a start on being greener.

If this has inspired you to get started, my top three tips are:

- 1) Look up the International Freezer Challenge (see the QR code below)



- 2) Turn off all non-essential computers at night/over the weekend.
- 3) Make Christmas decorations out of packaging like our talented BMS did last year for our entry to the Trust Christmas decoration competition.

