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## How can I make the NHS greener?

**Adele Waters** hears what doctors can do to make their specialties greener

Adele Waters

### As healthcare professionals, we have a unique opportunity and obligation

Eleanor Damm, co-chair of the environmental sustainability workgroup, Intensive Care Society UK, says, “What does ‘green intensive care practice’ look like? Well, firstly, let’s stop calling it ‘green.’”

“Sustainability should be a core consideration of how we deliver care—not an afterthought.

“The NHS produces 5% of the UK’s greenhouse gases so there is a clear need to embed environmental governance in each critical care unit. That means we have plenty in our in-tray:

- **Education:** integrate environmental sustainability in healthcare and planetary health across training curriculums and develop supporting educational material
- **Practice:** sustainability should be a key point throughout guidelines for the provision of intensive care services. We must review current practice and develop standards in line with the NHS’s commitment to reach net zero by 2045
- **Community:** build a community with our health professions to champion environmental priorities and maintain focus
- **Network:** establish a national network of sustainability champions with ring fenced time within all departments
- **Research:** our research priorities should be informed by environmental concerns through a planetary lens
- **Leadership:** create national (and local) environmental sustainability fellowships to lead and integrate required changes
- **Spread best practice:** what can we learn and integrate in our practice from other specialties—for example, carbon and resource reduction in the delivery of dialysis

To stay below 1.5°C of global warming, tackling the climate crisis demands urgent actions at a pace and scale not yet met by governmental targets. We, as healthcare professionals, have a unique opportunity and obligation. After all, first, we must do no harm.”

### Think and talk about the environment at work

Amanda Woodgate, GP and co-chair of East Midlands Greener Practice, says, “My first piece of advice is to think about everything you do from a patient and environmental point of view. We do so many things automatically—because guidelines say so, because it’s the cheapest option, or because that’s the way

it’s always been done. But is that the right thing for the patient or the planet?”

“Often there’s an option that’s not only better for the planet, but better for the patient as well. Does that patient need an antihypertensive today, or would they benefit from a healthier diet and physical activity, for example?”

“Secondly, talk about tackling climate change. Talking gets people thinking and that sends ripples. If you consider how many people we have contact with every day, you realise the great potential we have to make a real difference.

“Last year I gave a presentation on the NHS Green Plan for the practice and after that things snowballed. Staff (from the cleaner to the practice manager) came to me with new environmentally friendly ideas. We’ve now got a ‘green team’ to drive environmental initiatives.

“We’ve reduced our general waste by two thirds by recycling as much as we can and composting our food waste. We’ve become an ‘active practice,’ with several members of staff now cycling, walking, or car sharing.

“We’ve re-written our asthma protocols with a focus on greener inhaler prescribing and paper is a last resort, with information being sent by email or text where possible.

“So, to summarise—think about it, talk about it, and watch the seed you’ve planted grow.”

### We reduced our carbon footprint by reducing desflurane use

Arun Tohani, anaesthetic specialty trainee year 5 at Charing Cross Hospital, London, says, “The detrimental effects of CO<sub>2</sub> emissions are visible all over the world. As well as taking personal steps towards reducing our emissions, we need to think about what the NHS can do too.

“The NHS long term plan has many targets to reduce its carbon footprint. One area is the carbon emissions from anaesthetic gases which are responsible for 3% of the NHS carbon footprint. The aim is to reduce this by 40% through shifting away from desflurane use, effective capture, destruction or reuse of volatiles, and reducing the atmospheric release from leftover nitrous oxide canisters.

“Desflurane is one of the most potent greenhouse gases, producing 886 kg of CO<sub>2</sub> per 240 ml bottle and costs £63. Comparatively, sevoflurane produces 49 kg of CO<sub>2</sub> per 250 ml bottle and costs £49.

“Working with my colleague Rachel Grant, an anaesthetic core trainee year 3, I introduced a project to reduce our departments’ carbon footprint by

reducing desflurane use and encouraging low flow anaesthesia and total intravenous anaesthesia. We removed desflurane from the anaesthetic machines making it available only on request. Over the year our desflurane usage dropped to 0%, saving around £9063 and 439 670 kg of CO<sub>2</sub>.

“We learnt that behaviour can be changed by removing the causative agent. Feedback from the project revealed that anaesthetists were not using desflurane for any particular reason other than because it was available.

“We would encourage all anaesthetic departments to do the same and also look into the recapturing of nitrous oxide gas within obstetric and emergency departments where it is a big contributor to greenhouse gas emissions.”