

Two stylized blue birds flying in the upper left corner of the slide.

Managing Sustainability & Environmental Impact in Endoscopy

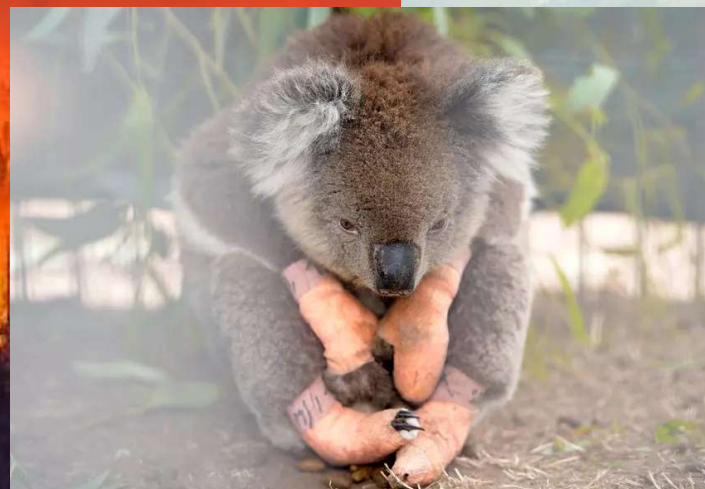
GIN 9th Annual Conference
London
28th Jan 2022

A cluster of stylized green trees on a green hill on the left side of the slide.Three stylized houses in shades of blue and green on a green hill on the right side of the slide.

Leigh Donnelly
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"The moment we decide to fulfil something,
we can do anything."

Greta Thunberg



Background

NHS England has announced its commitment to achieve net zero carbon emissions by 2040, and net zero within its supply chain by 2045 (NHS 2020).

Endoscopy is the third highest emitting hospital department generating about 3.09kg of waste per bed day

Which is equivalent to burning 39 million pounds of coal or 13,500 tons of plastic

Climate change and health

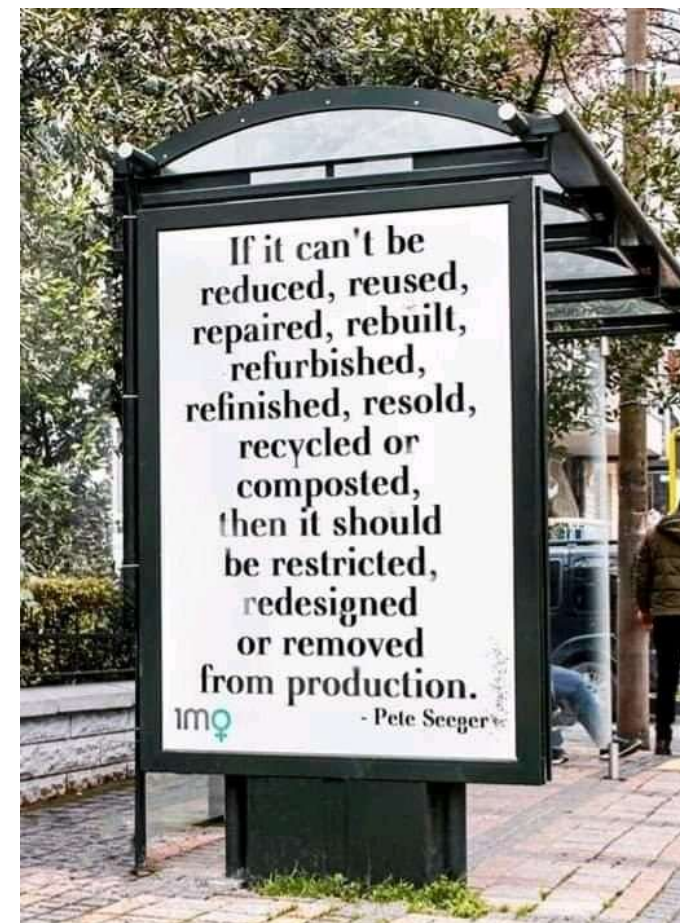
“Climate change is a major threat to health and threatens to undermine the last 50 years of public health gains,”

(Haddock et al 2021)

- Respiratory health due to pollution and smoke from wildfires
- Future pandemics like Covid-19
- Enteric pathogens due to raising water levels and flooding
- Malnutrition due to crop failure

What we need to do...

- Highlight the problem
- Engagement from your Teams
- Buy in from Management
- Close working relationships with local recycling centres
- Start with the simple things first



1.3 million employees in NHS as a whole – small changes make significant impact!

Making a change – how to start

- Change in Culture and Behaviour
- Creating a team of “Green Champions” or “Green Team”
- Sorting waste – separating clinical waste from domestic
- Recycling hard plastics & instruments
- Networking with waste management teams
- Work with local recycling centres
- Creating a sustainability promise



REDUCE-REUSE-RECYCLE

Appropriate patient selection & reduction in the amount of endoscopy could have the largest impact on carbon emissions

- Can surveillance procedures be reduced?
- Are there alternative investigations?
- Are procedures over used?

This will require a shift in behaviour patterns and attitudes

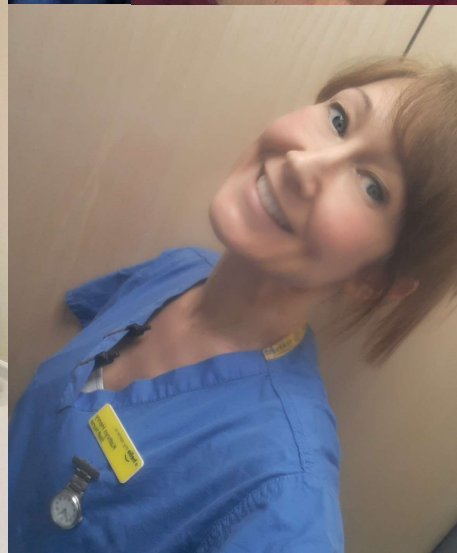
The Green Champions – our catalyst for change

Need to be:-

- Motivated
- Passionate
- Persuasive
- Informed
- Resilient



Our Green Champions



Waste management

- Sort domestic, clinical and recycling
- Recycle hard plastics
- Instrument recycling
- Reduce paper
- Dignity Shorts
- Absorbent pads
- Sterile Water and Bottles



Some of the hard plastic we can recycle



Instrument recycling

YES

- Biopsy forceps
- Guidewires
- Snares

NO

- Needles
- Syringes
- Ampules



Support from teams is essential

Entonox (50% nitrous oxide and 50% oxygen)

- Nitrous Oxide is a greenhouse gas
- It remains in the atmosphere for 110 years once released
- The warming potential of nitrous oxide is 300 times that of carbon dioxide
- When used in healthcare, up to 60% of nitrous oxide escapes into the atmosphere
- Look to educate our patients to make an informed choice



What's Next?

Continue to embrace the sustainability challenge

- Seek support/advice from other colleagues/departments/trusts
- Work with waste management teams
- Challenge industry regarding packaging
- Reduce the amount of sterile water used
- Paper and printing reduction
- Continue to develop links with local recycling centres
- Keep up the enthusiasm!



"What do you want to be
when you grow up?"



"Still here," said the
polar bear.

References

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Thank you for listening

