

Spotlight on series

September 2026

→ Sustainability

The climate crisis is one of the biggest threats to human health and wellbeing in history. Medical imaging and oncology care are resource-intensive activities, but simple measures can help reduce the environmental impact, usually saving money at the same time.

1

If it doesn't help the patient, don't do it!

- Avoid inappropriate imaging, procedures or treatment. This is primarily for the patient's benefit, but remember that eliminating unhelpful clinical activity can also be considered a part of sustainability efforts.
- Encourage clinicians to use iRefer and other evidence-based resources to guide imaging referrals. Beware of guidelines based on flimsy evidence.
- Oncology: promote the use of shared decision-making models with patients, including clear discussions of potential benefits, toxicities and other costs.
- Develop robust vetting and tailored imaging pathways to help both patients and the planet.



2



All hands on deck!

- Achieve meaningful change within imaging and oncology departments through teamwork and multidisciplinary cooperation.
- Aim to involve as many staff groups as possible and foster a collaborative spirit.
- Share successful sustainability work within and between departments.
- Engage with hospital-wide teams such as infection control and waste management to help effect change both within and beyond your own department – the Green Team or equivalent Sustainability group can help coordinate and promote efforts.

3



Reduce unnecessary travel

- Be mindful that patients' journeys to imaging and oncology departments often contribute the lion's share of an episode's carbon footprint.
- Consider one-stop-shop clinics and hub-and-spoke care delivery to reduce unnecessary patient travel.
- Image within the community using mobile units when appropriate.
- Encourage online clinical meetings and flexible job plans to help reduce staff travel.

4



Minimise consumables and switch single-use for reusable

- Be mindful that non-sterile gloves and use of couch roll can be cut down substantially without compromising care – engage with local infection prevention and control team to ensure PPE is being used appropriately.
- Aim to be paper-free or paper-light.
- Ensure active management of stock to prevent expiry before use, especially where single use devices and equipment are required.

5

Turn it off!

Be aware that:

- The majority of computers in radiology, radiotherapy and oncology departments can be safely turned off when not in use.
- Automated shutdown applications have been shown to accrue significant carbon and financial savings.
- Adjustment of heating, ventilation and air conditioning can also save a lot of carbon.



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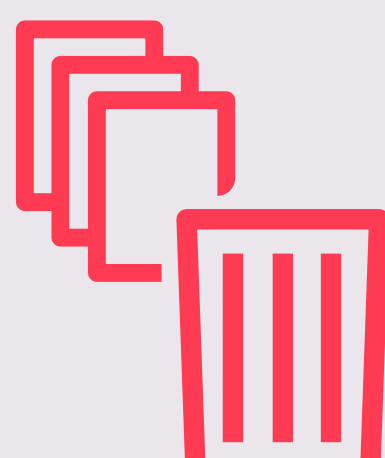
Don't stand idly by!

- Be mindful that energy intensive machines such as MRI scanners and linear accelerators (LINACs) consume a high proportion of energy in non-productive states.
- Tailor management to ensure idle modes are utilised efficiently to reflect local working practice and turn devices off altogether when appropriate to deliver substantial energy savings.
- Maximise patient scheduling efficiency to minimise lull periods and reduce energy use through avoidance of extended working days and weekend working – software may help with this (but beware of hidden energy costs of AI).

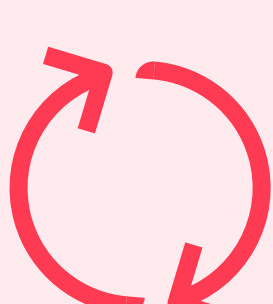
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Delete unnecessary data, store efficiently

- Be mindful that data storage is a significant "hidden" energy cost of imaging and oncology care.
- Ensure good data storage practice, avoiding storage of duplicates and unhelpful series, such as redundant thick slice reconstructions.
- Engage with PACS / IT managers and vendors to promote energy-efficient storage procedures.



8



Buyers beware

- Factor in sustainability during procurement processes.
- Whole life-cycle assessment is required to fully scrutinise the environmental impact of products and equipment.
- Consider whether features on new equipment offer real clinical benefit to justify the environmental impact of replacement and if refurbishment would be a better option.
- Source reusable items in preference to single-use where possible.
- Demand energy transparency for all equipment, devices and software from vendors, including training phase costs for AI.

9



Celebrate successes

- The climate crisis can feel like an overwhelming, insurmountable challenge when acting in isolation.
- Sharing good practice with colleagues in other centres can help reduce the feeling of isolation.
- Gaining recognition of progress through the Green Radiotherapy Framework or ESR's Green ID Scheme can help build momentum towards future challenges.
- Inclusion of Sustainability criteria in CQC inspection and RCR/CoR's QSI should motivate all department members if a habitable planet is insufficient motivation!

Acknowledgements

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References and useful links

QSI2026 contains three new standards on Sustainability

[Joint RCR/AXREM Sustainability Working Group | The Royal College of Radiologists](#)

[Green Radiotherapy Framework | The Royal College of Radiologists](#)

[Green Imaging Department \(ID\) – ESR | European Society of Radiology](#)