



Environmental sustainability in cancer research

Survey findings (2024/25)

Together we are beating cancer

A changing environment and our research strategy



- Laid out in our <u>research strategy</u>, our vision for a better future includes preventing cancers from developing in the first place
- With ongoing climate and environmental change, however, some cancers may become more prevalent, such as lung cancer with rising air pollution and forest fires
- We also want to sustain our research into the future, and that means adapting to wider changes happening in society and the natural world
- Ensuring that the research we support and undertake ourselves have a minimal impact on the environment is therefore key

Our environmental sustainability strategy

Cancer Research UK (CRUK) published its environmental sustainability strategy in 2024, setting out the path for the next three years (2024-2027):

As a major funder of research, we'll drive greener practices across the cancer research community.

We will also improve our own ways of working, such as in our wholly-owned laboratories in Cancer Research Horizons.



Read the <u>Cancer</u>
<u>Research UK</u>
<u>Environmental</u>
<u>sustainability</u>
<u>strategy</u> (2024-2027)

Addressing the environmental impact of cancer research

- Cancer Research UK became a signatory to the <u>Concordat for the Environmental</u>
 <u>Sustainability of R&I Practice</u> ('Environmental Sustainability Concordat' or simply
 'the Concordat) upon its launch
- This underscores our commitment to driving environmental sustainability in cancer research, and builds on the:
 - progress of all our laboratories in <u>Cancer Research Horizons</u> in achieving Laboratory Efficiency Assessment Framework (<u>LEAF</u>) Gold award
 - publication of our funding policy (shown on the next slide)

Addressing the environmental impact of cancer research

Environmental research in funding policy

To support culture change towards greener and more efficient research practices, we published a new funding policy in April 2024 that introduced new requirements and allowable costs for our grants:



Lead and Joint Lead applicants for response-mode funding to hold lab sustainability certification at Silver level to be eligible to apply



Organisations hosting- or planning to host CRUK-funded researchers to be signatories of the Environmental Sustainability Concordat



Group leaders and Facilities at CRUK Institutes to hold LEAF Silver

Required from 1 January 2026



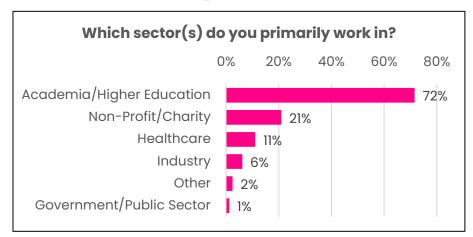
Clarifying how our grants can be used for 'greener' costs, such as: reusing data; procuring second-hand equipment; low-carbon travel; and training in sustainable research practices.

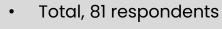
Surveying researchers and research professionals

- To help shape our initial approach as a Concordat signatory, we undertook a consultation in late 2024 and early 2025, including an open survey aiming to examine (amongst researchers and professionals in cancer research):
 - awareness of our funding policy
 - motivations to make cancer research more environmentally sustainable
 - challenges experienced
- This report includes analysis of these areas, as well as feedback provided by researchers and research professionals on the key 'priority areas' of the Environmental Sustainability Concordat (described in more detail later in this report)

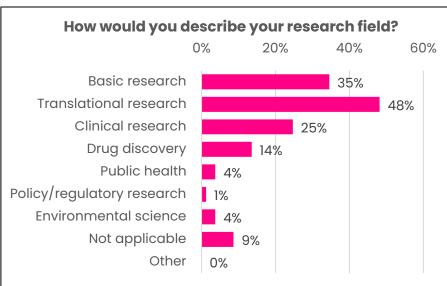


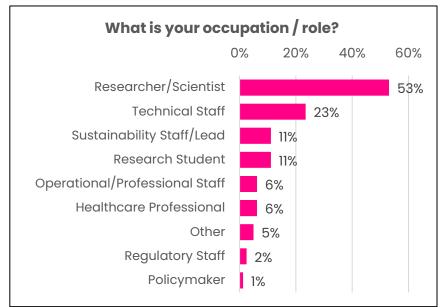
Who responded to the survey?

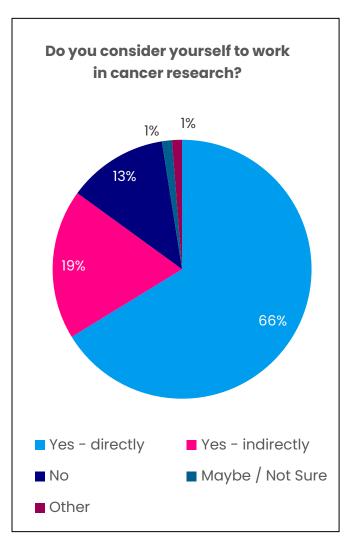




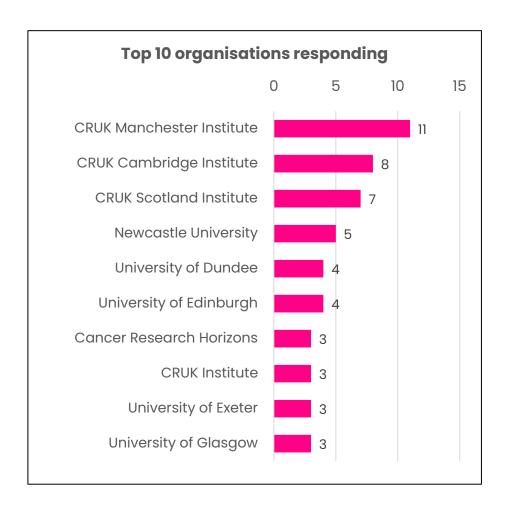
- Survey ran in late 2024 and early 2025
- Around 1 in 5 worked 'indirectly' in cancer, such as within the life sciences
- The majority work in academic research, but are otherwise diverse in the role and discipline they work in

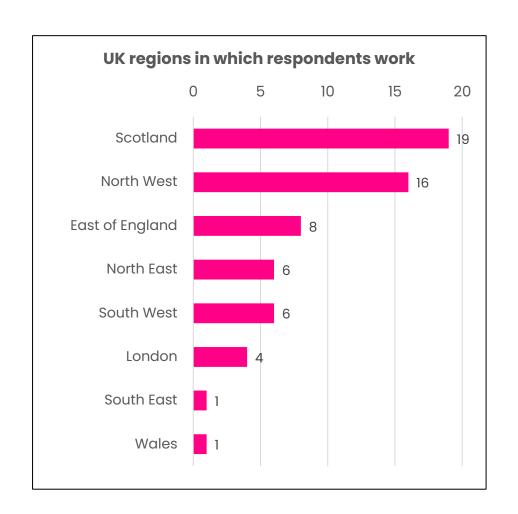




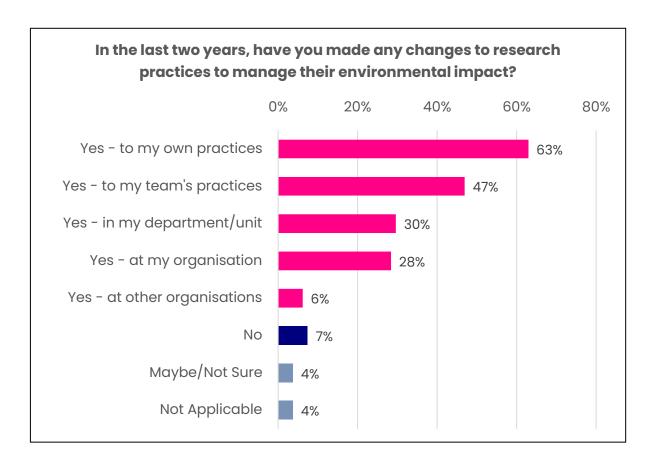


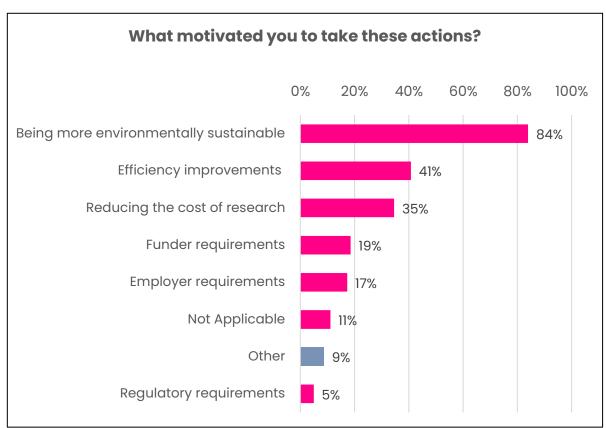
Who responded to the survey?





Commitment and motivations



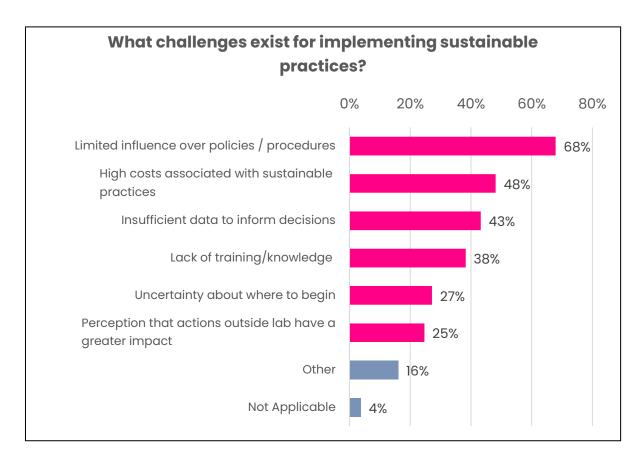


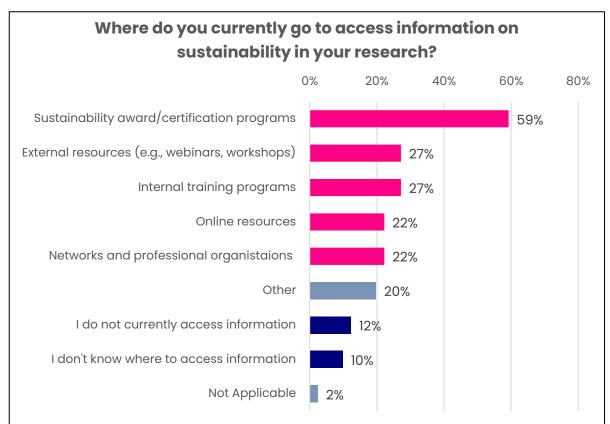
Respondents could select one or more answers

- Respondents take personal and collective responsibility for the impact of their research activities
- Only a very small proportion (7%) had not made any changes

- Lowering the environmental impact of research is the primary driver for taking action
- The potential for making time and costs savings is also important but to a lesser degree

Challenges and guidance

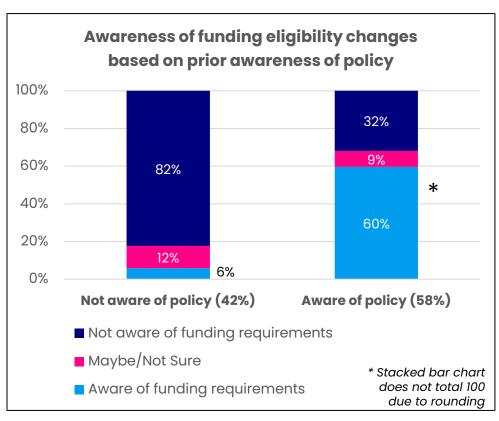


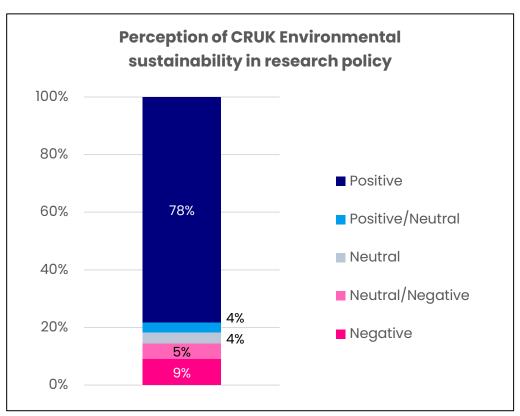


Respondents could select one or more answers

- Respondents consistently report a perceived lack of influence over implementing more sustainable research
- Potential costs of transitioning to more sustainable research activities and evidence to justify the transition are also key challenges
- Laboratory sustainability certifications, such as those required in our new funding policy are by far the most frequently used source of information on sustainability in research

CRUK environmental sustainability in research policy





Read our new <u>'environmental sustainability in research' funding policy</u> – new funding eligibility criteria to take effect from 2026

- As expected, those unaware of the policy (42% of respondents) were also unlikely to know about the new funding requirements described in it
- Surprisingly, a third of those already aware of CRUK's new policy (58% of respondents) did not know that it included new funding requirements
- A large majority of respondents (82%) have a positive perception of the policy's potential impact
- Those with a negative perception most commonly questioned whether the policy would translate into culture change amongst researchers

Key insights

Over half of respondents work as active researchers





Nearly three-quarters of respondents work in academia

Two out of three work directly in cancer research



Four in five respondents were positive about our new funding policy

- Respondents tend to make changes on a local basis to be more sustainable (e.g., their own lab) and less across their organisation
- The primary driver for these changes is to be more environmentally sustainable, though costs and efficiency savings are also given as motivations
- There is a clear opportunity for institutions and funders to complement respondents' efforts by evolving policy and incentivising good practice
- Respondents largely look to recognisable standards, such as sustainability certifications, to inform and guide their activity



Priority areas of the Concordat

As part of us setting our future approach as a signatory of the Environmental Sustainability Concordat, we asked survey respondents to provide their thoughts, ideas and examples of practice in line with five of the six priority areas* of the Concordat (excluding *Environmental impact and reporting data*):







Sustainable procurement







Collaborations and partnerships

8



With regards to each priority area, we have analysed and summarised respondents' feedback in the following pages in relation to:

- barriers to addressing the priority area
- potential solutions and examples of practice
- their perceptions of the **potential role played by research funders** like Cancer Research UK

Leadership and system change

Survey respondents:

Main barriers

- Evidence and data are critical for encouraging researchers and others to take action
- Equally, a top-down commitment is needed to ensure widespread engagement by researchers
- Entrenched views about how research 'should be done'
- Time and financial resources
 needed to make changes to the way
 research is conducted

Solutions and current practices

- Additional funding is needed to enable sustainable practices
- Lab sustainability staff and services should be connected better with leadership
- Education for researchers, such as during induction training
- Sharing practices within- and across research environments
- Generating and sharing evidence on the environmental impact of research

- Attaching requirements around sustainability to funding access
- Creating financial incentives and dedicated funds for sustainable research practices
- Using their prominent position to educate researchers and leaders
- **Encouraging collaboration** amongst institutions
- In general, leading by example

Sustainable infrastructure

Survey respondents:

Main barriers

- The cost of equipment upgrades aren't covered through grant funding and is deprioritised in relation to other research costs
- A change in logistics is needed to coordinate sustainable infrastructure
- Green practices are available but not often adopted, often through absent training or awareness
- Aging and cramped buildings are inherently unsustainable

Solutions and current practices

- Awareness and training on changes in labs can be delivered through frameworks like LEAF
- Assigning specific staff/offices can help coordinate and centralise greener infrastructure
- Alerting researchers to quick wins helps mitigate challenges of older buildings
- Carrying out independent tests on how to better use existing infrastructure if it can't be replaced currently

- Allocating a proportion of grants to update inefficient equipment
- Using funding policy to require a certain standard in infrastructure usage
- Using funding applications for evidence of using infrastructure sustainably
- Ensure a joined-up approach with funders and others making expectations of infrastructure

Sustainable procurement

Survey respondents:

Main barriers

- More sustainable alternatives are generally perceived as more expensive
- Reliable data on environmental impact of products from suppliers is rare
- Researchers lack time to browse for more sustainable alternatives
- There is a limited choice of suppliers to purchase supposed 'sustainable' products from
- A general lack of awareness around the 'life cycle' of products

Solutions and current practices

- Governmental regulation is needed to ensure suppliers' claims of sustainability are legitimate
- Institutional policies and training to aid researchers' procurement
- On-site stores for buying in bulk and centralised ordering to reduce transport and packaging
- Clearer data for procured goods, handled by dedicated staff

- Evolving funding policy to incentivise suppliers to provide better data and more sustainable products
- Costings of grants to require
 evidence of sourcing sustainably
- Convening- or supporting shared procurement activities amongst organisations they fund
- Uplifting awards to compensate for price of greener procurement

Emissions from business and academic travel

Survey respondents:

Main barriers

- Low carbon travel options like train are more expensive and take longer than flying
- Public transport is unreliable
- Employers' policies and travel arrangers (e.g., third parties) are designed for air travel
- A strong culture of meeting inperson, particularly 'world' congresses
- Virtual events are less effective for building networks

Solutions and current practices

- Conference organisers to offer more hybrid options
- Incentivise lower carbon travel both locally and on longer trips
- Policies and potentially restrictions on academic travel
- Governmental pressure (local and national) to enable lower carbon travel
- In future, potential of VR
 'attendance' at events

- Funding panels to be held online
- Introducing travel requirements to force use of more sustainable options and incentivise virtual attendance
- In future, ban or severely limit the use of certain types of travel
- Cover the additional costs
 associated with greener travel

Collaborations and partnerships

Survey respondents:

Main barriers

- Stakeholders are at different stages of the sustainability journey, with some still lacking buy-in from leadership
- Partnerships are expected to focus primarily on patient benefit over other aspects such as sustainability
- Practice sharing is time- and resource demanding
- Interdisciplinary and intersectoral collaboration can be challenging to achieve

Solutions and current practices

- Form sustainability committees to enable practice sharing within and across organisations
- Ensure processes and methods to achieve greener research are made open to the sector
- Organise events to emphasise the importance of environmental sustainability in research

- Coordinate with other funders and institutions channels/ platforms for sharing knowledge
- Introduce environment-focused requirements in collaboration negotiating
- Organise events/webinars to specifically address sustainability in cancer research

Examples of best practice

Leadership and system change

- Awareness raising around plastic consumption within individual labs (and friendly competition to reduce labs' usage)
- · Including sustainability in experimental design
- Publishing all findings to avoid duplicating effort
- Using sustainability certification to raise standards through peer-topeer influence
- Introducing sustainability sections of regular meetings (e.g., departmental)

Sustainable infrastructure

- Moving to paperless clinical trials
- · Equipment sharing within institute
- Turning off equipment when not in use (i.e., not using 'standby' mode)
- Replacing old ultra-low temp. (ULT) freezers with more efficient versions
- Increasing the temperature of ultra-low temperature freezers to -70°C
- Patient-derived cell models to replace animals used in research

Sustainable procurement

- Conducting research into impact of reducing animal serum in tissue culture
- Researching suppliers' sustainability credentials
- Improved disposal processes for environmental toxins
- Improved use of 'bio-bins'
- Switching to recycled plastic tube for tissue culture and glass tubes wherever possible

Emissions from business and academic travel

- Institutional travel policies regulate choice of travel and require justification for travelling overseas
- Monetary support to take public transport, electric vehicle charging stations at work and shuttle transfer between research locations
- Increased incidence of virtual/hybrid events since the pandemic
- Emphasising the environmental value of selecting to 'attend' virtually

Collaboration and partnerships

No clear examples of best practice given

Conclusions

- Our new funding requirements around lab sustainability certification reflect well our findings from this survey that respondents most typically refer to them over other sources of information
- Efforts in the future should focus on encouraging researchers to support changes more widely than their immediate environment
- Respondents highlight the prominent voice and influence CRUK possesses and how to use both for incentivising and even requiring better practice
- Meeting the Concordat's priority areas requires collective action, voiced by funding organisations, led by research institutions, and driven by researchers and professionals in cancer

Next steps

- We will base our approach around feedback gathered through this survey as well as other elements of the consultation (focus groups and conversations held with our core-funded infrastructure)
- These will inform our first Environmental Sustainability Concordat action plan, including immediate goals and longer-term objectives to reach net zero by 2050 and reduce other environmental impacts of research we support and conduct
- We will continue to work with other Concordat signatories as we develop and evolve our strategy, and share practices and evidence we collect to stimulate broader change
- Across 2025 and into 2026, we will roll out our funding policy, including raising awareness
 of it further, and work with research organisations to understand their readiness to meet
 the policy and any challenges they face

Get involved

To get involved with our work around environmental sustainability in research or for further information, contact policies@cancer.org.uk

You can reach out to the corporate ESG team at sustainability@cancer.org.uk

Special thanks to the Cancer Research Horizons Sustainability Network for supporting the development of the survey and to Miya Choda (Sustainability Intern) for leading the consultation

