

# Towards A Net Zero Clinical Research Facility: The NIHR Oxford Health CRF Green Plan Strategy

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**Aim:** With the NHS being responsible for approximately 4% UK carbon emissions, clinical research can play an important role in reducing the 'carbon footprint' of the NHS<sup>1</sup>. A Green Plan was therefore implemented to enable the NIHR Oxford Health Clinical Research Facility (OH-CRF) to contribute to the NHS aim to be "Net Zero" by 2040<sup>2</sup>.

## Methodology:

A 5-year Green Plan was developed using NHS guidance<sup>3</sup>. It identified 30 OH-CRF specific strategies across the areas of:

- 🌐 Promoting digitalisation
- 🌐 Reducing healthcare-related waste
- 🌐 Improving processes and service accessibility
- 🌐 Reducing travel and transport use.

The finalised Green Plan was implemented in March 2023

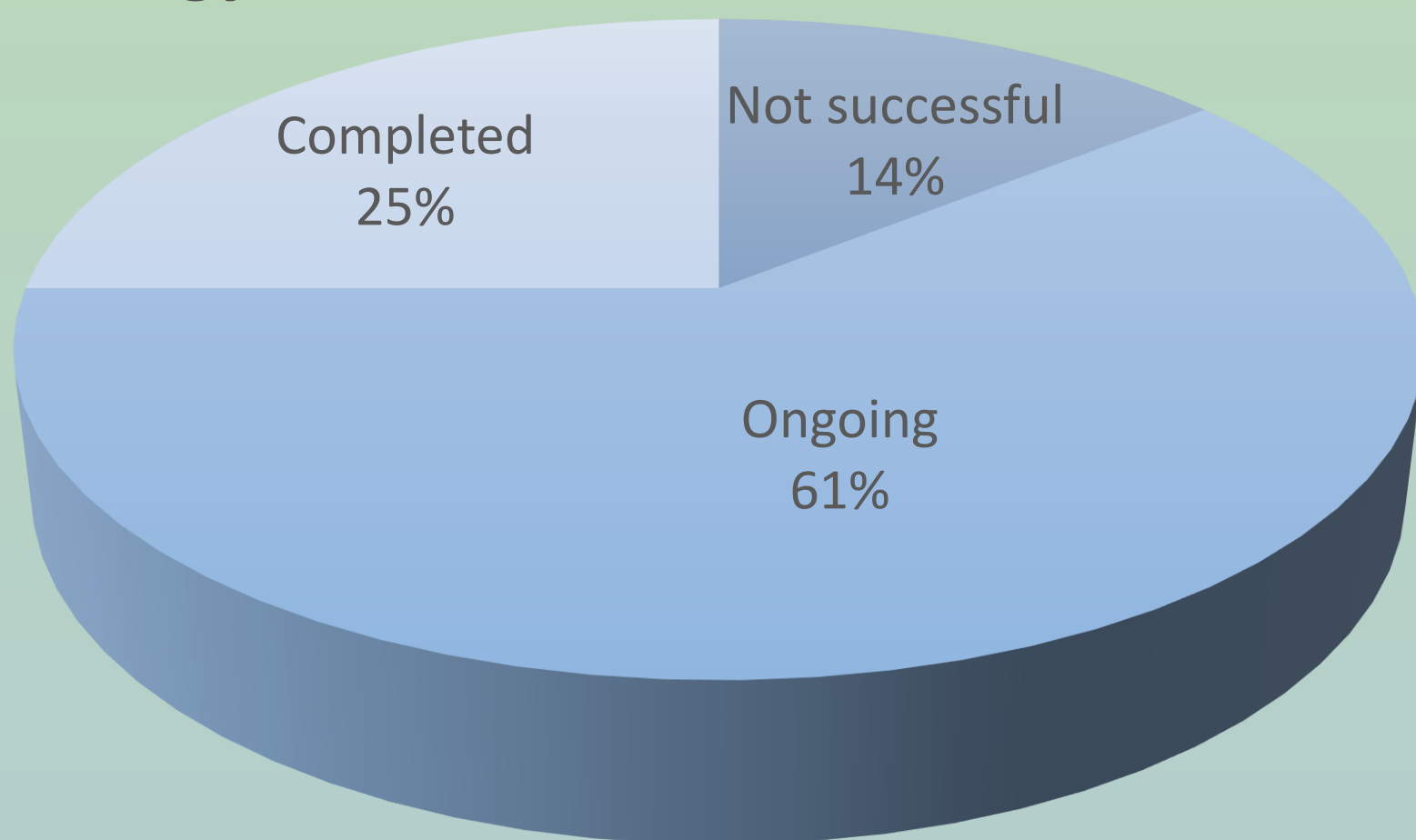
An audit of how many of the a-priori established goals was conducted every six months (August 2023, March 2024) to establish success rate and compare the planned goal with the benefit obtained.

Feedback was gathered from OH-CRF staff in June 2024 regarding implementation of the plan and challenges experienced over the previous year.

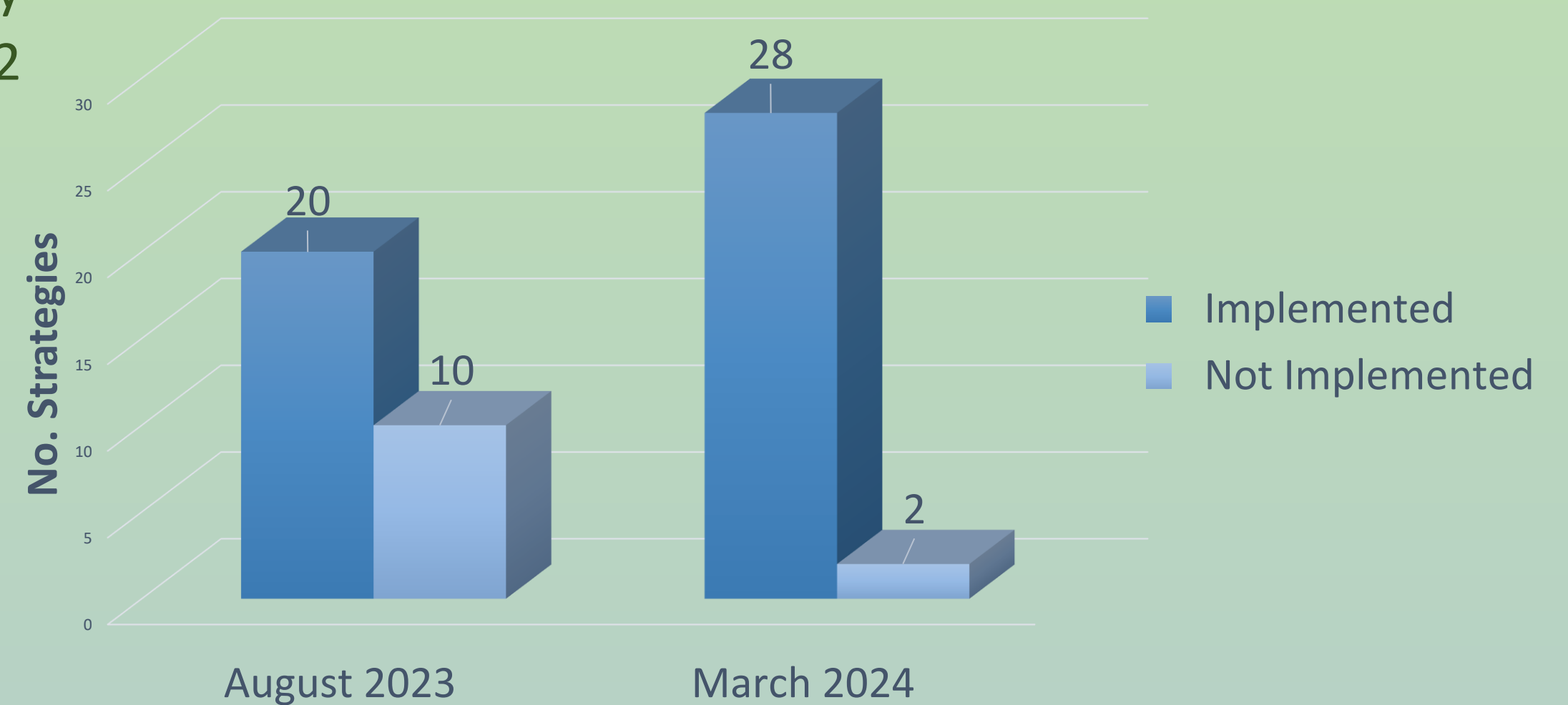
## Results:

In August 2023, 20 (66%) strategies were implemented. By March 2024, 28 (93%) strategies were implemented whilst 2 (7%) had been attempted but were not possible.

## Strategy Success:



## Plan Implementation:



Of the strategies implemented 7 (25%) were completed, 17 (61%) were ongoing and 4 (14%) were implemented but not successfully by March 2024. Degree of success was analysed and further illuminated through an anonymous, electronic questionnaire filled in by 9 OH-CRF staff-members.

## Successful Strategies Included:

- 🌐 Digitalisation through use of electronic archiving, secure email communications and eCRFs where possible.
- 🌐 Use of virtual visits and reduction in number of face-to-face visits when protocols allowed.
- 🌐 Reduction of stock medication orders, reducing waste and transport.
- 🌐 Introduction of an SOP to coordinate repurposing of research materials.
- 🌐 Reduction of single use items for hospitality.

## Less successful strategies included:

- 🌐 Reduction of general stock orders for the unit due to demand.
- 🌐 Use of a cycle-post system for short distance transportation of materials due to logistical factors.
- 🌐 Sponsor agreement to green strategies during study set up due to protocol requirements and communication.

## Feedback:

- 🌐 Staff buy-in to the green plan was good with an average rating of 7.89/10 for importance of sustainability in OH-CRF. However, whilst 100% of staff were aware of the plan, only 55% staff were aware of specific goals relevant to their role.
- 🌐 Reducing stock (general and medication) was seen as a realistic aim with staff rating it as 4/5 but feedback noted that communication, time to check stock levels and plan and varying demand influence ability to carry out this goal.
- 🌐 Digitalisation was seen as a less realistic aim with a rating of 3.78/5. Cost, reliability of electronic systems, study sponsor and protocol requirements, training needs and participant accessibility were noted as influencing factors.

## Conclusion:

Overall, the Green Plan was successfully developed and implemented with good staff involvement and awareness. Implementation of the plan highlighted the need for good communication, time and affordable, reliable, purpose-fit alternatives to traditional paper documentation in achieving a more sustainable approach to healthcare research. Study sponsor and protocol requirements were also demonstrated to be a key influencing factor.

## Next Steps:

- 🌐 Earlier discussion with sponsors regarding green initiatives such as stock repurposing and document digitalisation.
- 🌐 Pilot of rating scale digitalisation to promote time for training, system familiarity and opportunity to establish reliability of electronic versions.

## REFERENCES:

- <sup>1</sup> NHS England, 2022. National Ambition. Available at: [Greener NHS » National ambition \(england.nhs.uk\)](https://www.nhs.uk/our-work/our-ambition/)
- <sup>2</sup> NHS England, 2022. Delivering a 'Net Zero' National Health Service. Available at: [B1728-delivering-a-net-zero-nhs-july-2022.pdf \(england.nhs.uk\)](https://www.nhs.uk/our-work/our-ambition/)
- <sup>3</sup> NHS, 2021. How to produce a Green Plan: Three-year strategy towards Net Zero. Available at: <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2021/06/B0507-how-to-produce-a-green-plan-three-year-strategy-towards-net-zero-june-2021.pdf>