



# Virtual Spring Symposium 2021

*16<sup>th</sup> & 17<sup>th</sup> March 2021*

## Developing a Hero to Tackle Carbon Net Zero!



East of England  
Regional Sustainability Network

### ***Stella Cockerill:***

NHS Sustainability Programme Lead for the East of England  
[stella.cockerill@phe.gov.uk](mailto:stella.cockerill@phe.gov.uk)

### ***Jan Yates:***

Health Education East of England, Head of School, Public Health  
[jan.yates@hee.nhs.uk](mailto:jan.yates@hee.nhs.uk)



# WELCOME & INTRODUCTIONS

Format for the session





# AGENDA



**National view** - A greener NHS - Net Zero plan, targets & expectations

THE WHAT, WHEN & WHY



**Understanding the challenge** - A view from the East of England NHS Network

THE HOW, WHERE & WHO



**Developing a Carbon Net Zero Hero!** – The attitudes & behaviors required



**The role of educators in a greener NHS** - How can you help?



# NATIONAL VIEW

A greener NHS - Net Zero Plan, targets & expectations

THE WHAT, WHEN & WHY



# WHAT do we mean by the sustainability agenda?

## WARM UP EXERCISE

What does the word  
'sustainability' mean  
to you?

Take a few seconds to jot down  
what comes to your mind when  
you think about the NHS being  
more sustainable.



**NHS England and NHS Improvement** ✓ @NHSEngland · Oct 1

The NHS has today adopted a multiyear plan to become the world's first carbon net zero national health system. Read the Net Zero report to find out more. [#GreenerNHS england.nhs.uk/2020/10/nhs-be...](https://www.england.nhs.uk/2020/10/nhs-be...)



**'2020 has been dominated by  
COVID-19 and is the most pressing  
health emergency facing us. But  
undoubtedly climate change poses  
the most profound long-term threat  
to the health of the nation.'**

**Sir Simon Stevens**  
Chief Executive Officer,  
NHS England and NHS Improvement



394

405

336

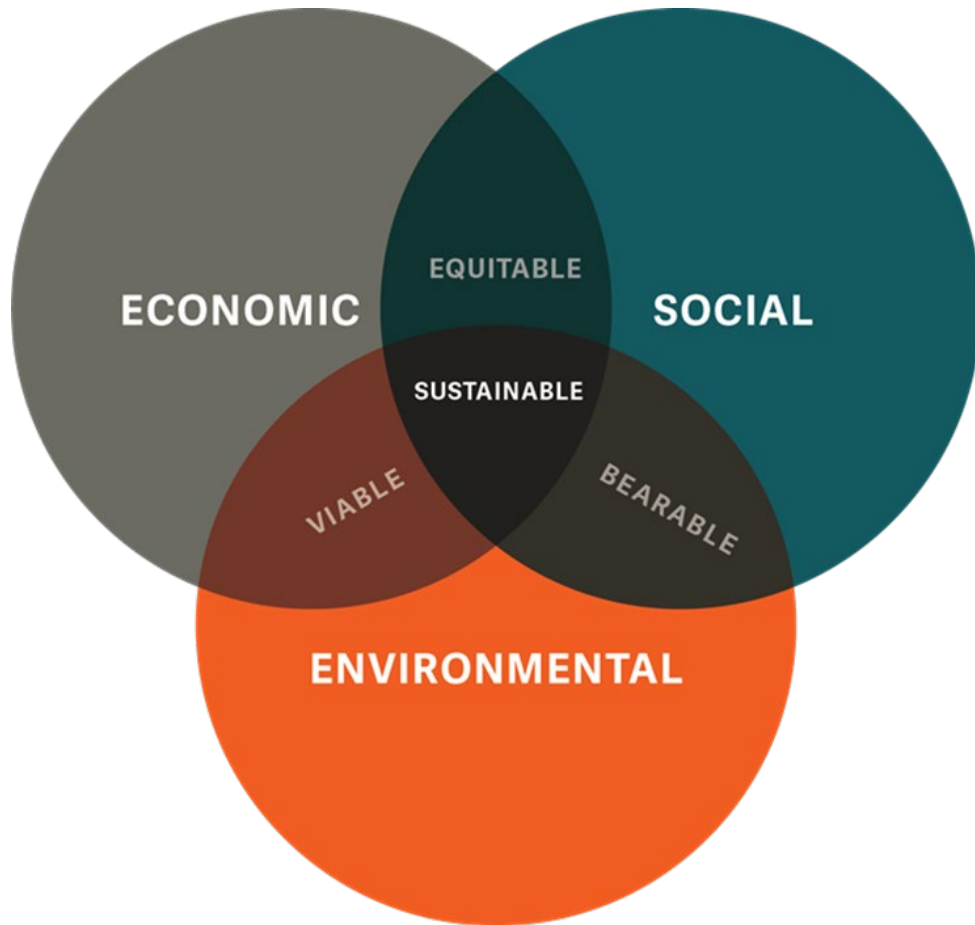




# WHAT factors are currently most influential?



*Sustainability is about making sure we consider:*  
the **environmental**, **economic** and **social** impacts of  
our decisions



**What do you think has the most influence now?**

1. All 3 factors have **equal influence** on decisions and actions
2. **Social factors** (patient care & equality of access) have the biggest influence on decisions and actions
3. **Economic/finance** has the biggest influence on decisions and actions
4. **Environmental factors** are **usually considered** even if not the main influence on decisions and actions
5. **Environmental factors** are **seldom considered** and have little influence on decisions and actions

Meeting the needs of today without compromising the needs of tomorrow



# WHAT are the key facts?



1. As the biggest employer in the Country the NHS in England is responsible for an estimated 4-5% of the country's carbon footprint
2. If health services across the world were their own country, they would be the fifth-largest emitter on the planet
3. With 1.3 million staff in the NHS we have a huge opportunity to make a difference
4. Carbon dioxide (CO<sub>2</sub>) levels and other [greenhouse gases in the atmosphere](#) rose to new records in 2019.
5. 2019 was the [second warmest year on record](#) and the end of the warmest decade (2010- 2019) ever recorded.
6. Although greenhouse gas emissions are projected to drop about 6 per cent in 2020 due to travel bans and economic slowdowns resulting from the COVID-19 pandemic, this improvement is only temporary. [Climate change is not on pause](#).





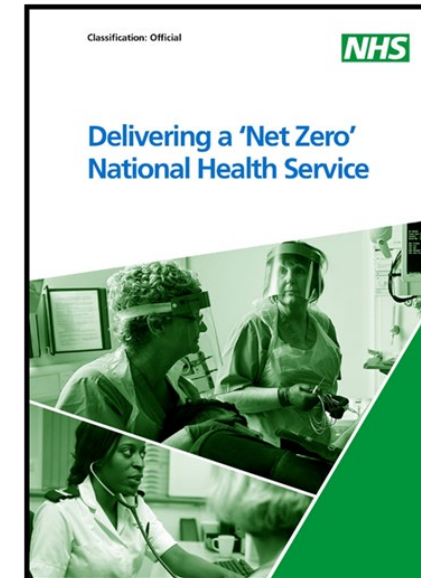
# WHAT are the government's commitments?

1. **Climate Change Act 2008**- First piece of legislation to set targets for reduction of carbon emissions.
2. **Public Services (Social Value) Act 2012**- any public body must take account of social, economic and environmental issues when procuring or commissioning (though the Act does not say how)
3. **United Nation's Sustainable Development Goals 2015**- 17 Goals which recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our environment
4. **The Paris Agreement 2015**-Set out a global action plan to avoid dangerous climate change by limiting global warming to well below 2°C. Local government bodies were to scale up their efforts and support actions to reduce emissions; the EU to reduce emissions by at least 40% by 2030
5. **NHS Constitution Principle 6 –The NHS is committed to providing best value for taxpayers' money.** It is committed to providing the most effective, fair and sustainable use of finite resources. Public funds for healthcare will be devoted solely to the benefit of the people that the NHS serves.
6. **NHS Long term plan**-The NHS committed to a 10-year “Long Term Plan” for the first time, including several key commitments on sustainable development:



7. January 2020 the launch of the **Greener NHS Campaign**

The **WHO** – staff hospitals & partners



8. **December 2020** NHS publish their commitment to **NET ZERO**

Sets out the **WHY**, the **WHAT** & the **WHEN**

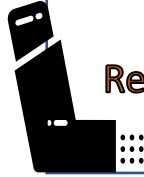




# WHAT & WHEN are we expected to deliver in the LTP?



## Improve Air Quality



## Reduce carbon, waste and water



## Reduce single use plastics

### THE NHS Long Term Plan targets

Cut business mileage and fleet air pollutant emissions by 20% by 2023/24

Ensure that at least 90% of the NHS fleet will use low-emissions engines (including 25% Ultra Low Emissions) by 2028

### Estates & Facilities Management:

- Ensure trusts adhere to best practice efficiency standards and adopt new innovations
- Improve energy efficiency by implementing LED lighting and smart energy management
- Fully phase out coal and oil as a primary heating source in all NHS sites

### Clinical hotspots:

- Realise carbon reduction opportunities from inhalers and anaesthetic gases

### Plastics Pledge: By April 2021 reduce the use of:

- Plastic stirrers
- Straws
- Single-use plastic cutlery, plates or single-use cups made of expanded polystyrene or oxo-degradable plastics
- Plastic food containers and other plastic cups for beverages

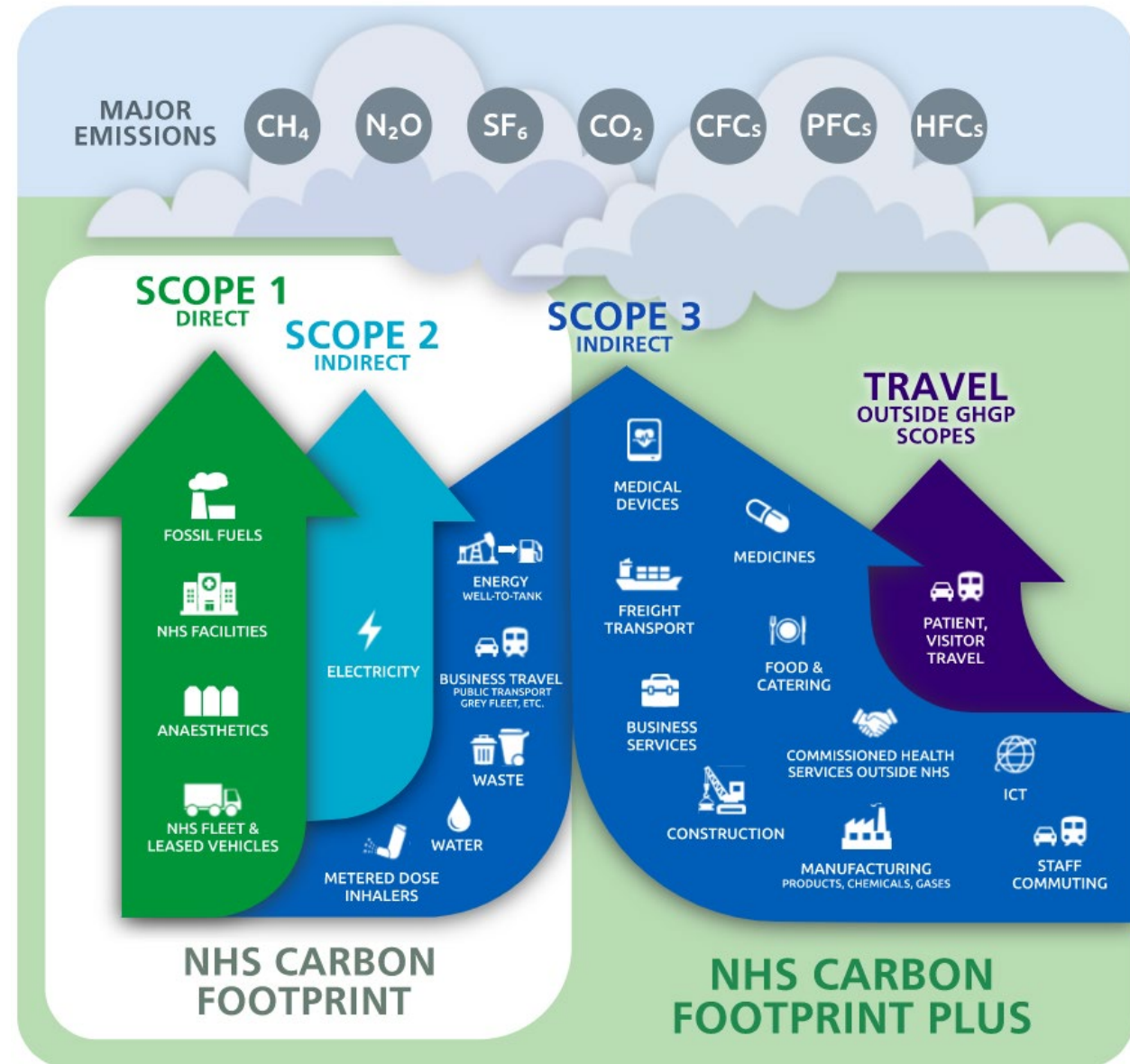
Next steps will include clinical plastics (e.g. Gloves Off Campaign with GOSH and RCN)



# WHAT does the Net Zero report say about the Carbon Footprint of the NHS?

**The NHS Carbon Footprint:**  
emissions in the NHS' direct control (closely matched to the Climate Change Act requirements)

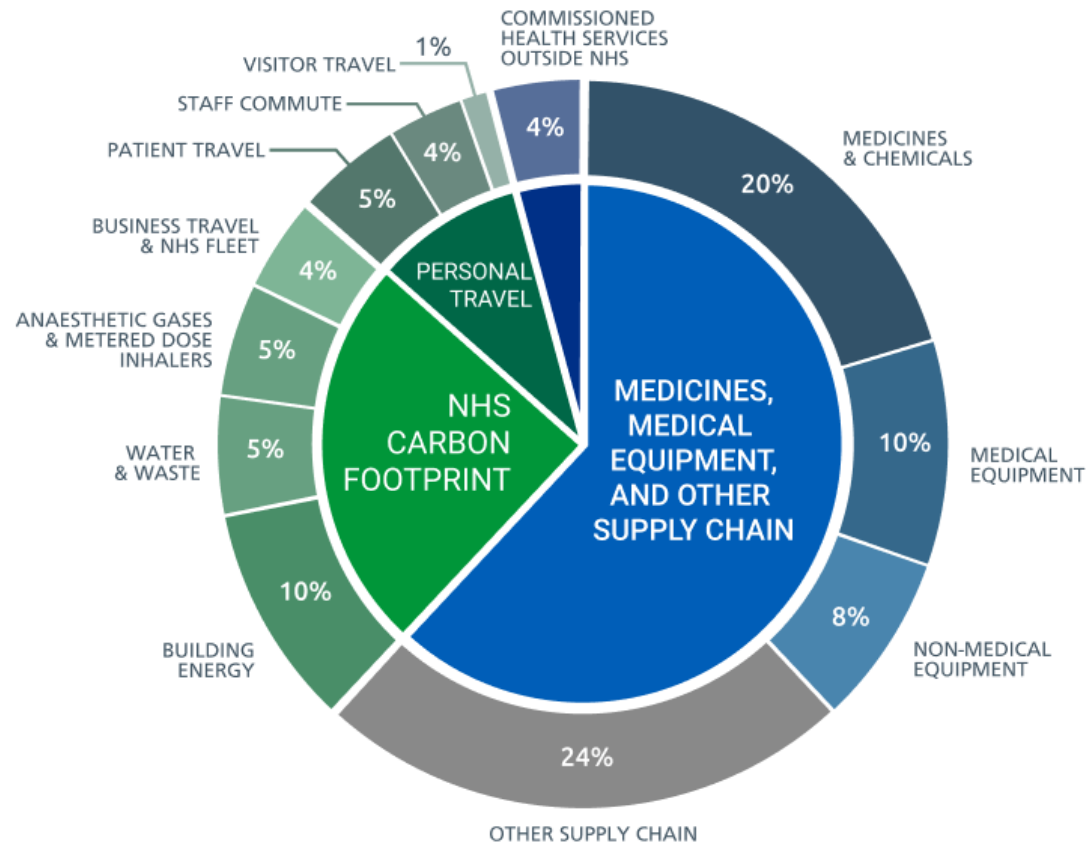
**The NHS Carbon Footprint Plus:**  
wider NHS influence – includes supply chain (covering the Greenhouse Gas Protocol scopes 1-3, and wider including patient and visitor travel to and from NHS services and medicines used within the home)





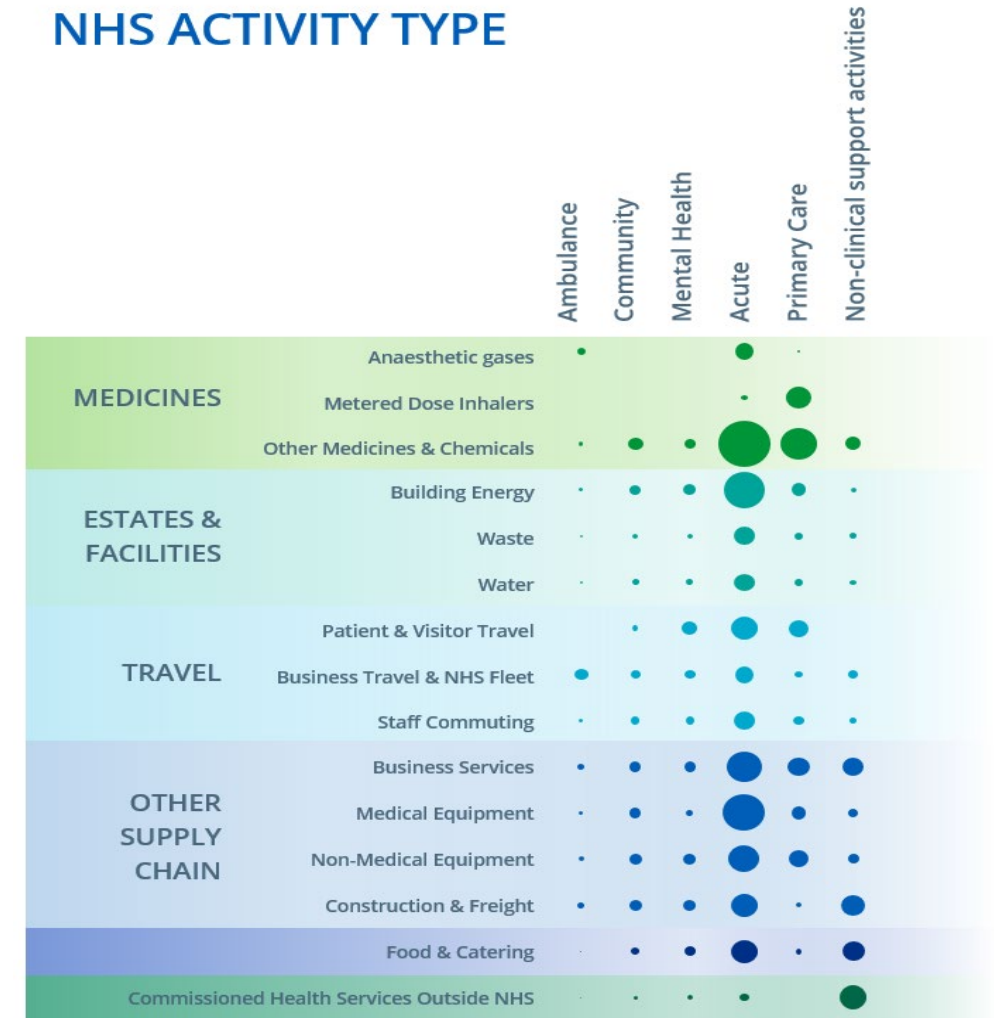
# WHAT are the major contributors to the Carbon Footprint of the NHS?

**The NHS Carbon Footprint:** emissions in the NHS' direct control  
**The NHS Carbon Footprint Plus:** wider NHS influence – including supply chain and travel



Sources of carbon emissions by proportion of NHS Carbon Footprint Plus

## NHS ACTIVITY TYPE



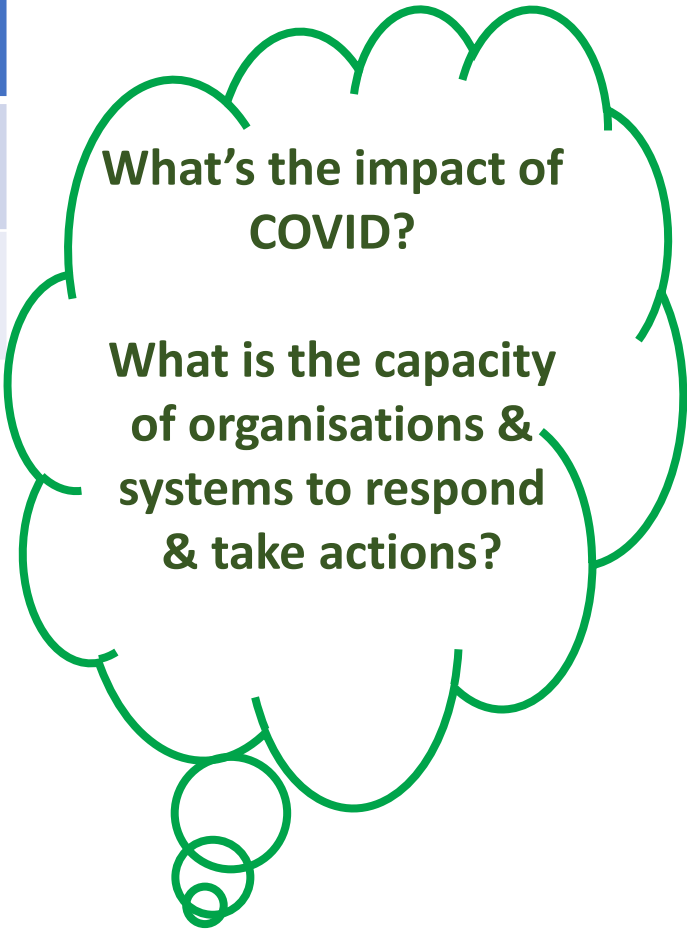
Sources of carbon emissions by activity type and setting of care



# WHEN are we expected to reach Net Zero?

Scope	Interim target	Net Zero
NHS Carbon Footprint	80% reduction by 2028-32	2040
NHS Carbon Footprint Plus	80% reduction by 2036-39	2045

- The two targets above are based on the scale of the challenge, current knowledge, and the interventions and assumptions that underpin analysis
- These dates assume that the NHS is successful in securing the investment, capacity and capability required to deliver all actions identified to date.
- To reach the lower ends of these dates, the NHS would also need to drive for more aggressive action on its own activities (e.g. action on inhalers, anaesthetics, travel and transport) and on the action of its partners that contribute to the NHS Carbon Footprint Plus.
- The date ranges above will be refined through updated analysis every five years.





# UNDERSTANDING THE CHALLENGE

A view from the East of England NHS Network **THE HOW, WHERE & WHO**





# There's a journey we must go on and no more delay !

NHS organisational carbon emissions are primarily tied to **what the service consumes** and **how it is consumed**.

The core elements of consumption divide into two groups:

- A. **The more directly controllable:** utilities (principally gas, electricity and water) + business travel miles + anaesthetics, inhalers and refrigerants + waste management.

This is the *NHS Carbon Footprint* with a net-zero target of  $\approx$  **50% reduction** in the next 10 years from a 2019 baseline

- A. **Less directly controllable:** goods, materials and equipment + pharmaceuticals + food + access travel miles.

This is the *NHS Carbon Footprint Plus* with a net-Zero target of  $\approx$  **70% reduction** in the next 15 years from a 2019 baseline.

We know why we need to act; we know roughly what to do and when to do it by. What is **missing**, and must be urgently planned out, adopted and underway in the next six months **is: how to do it**, exactly **who** is going to do it and precisely **where** it is going to be done across our region.

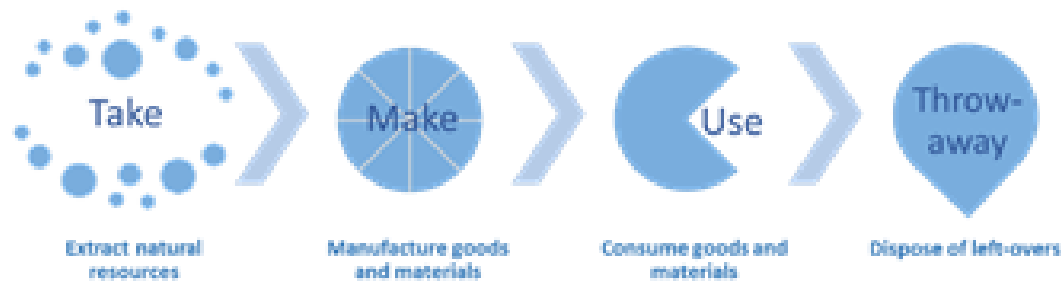
# HOW do we shift from a circular to a linear economy?

From high-carbon<>high-waste linear economy

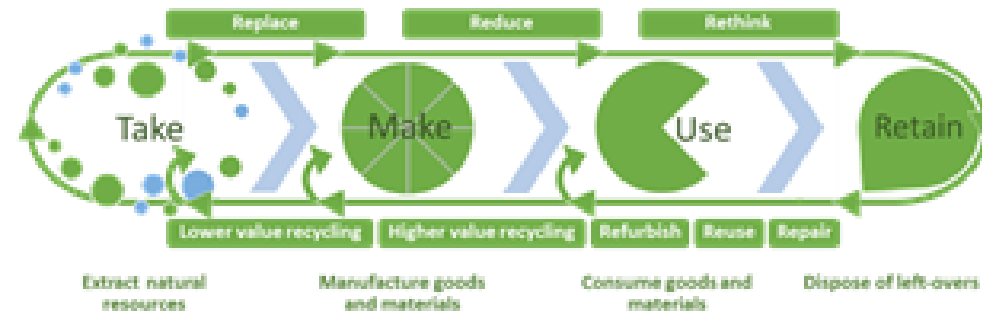
To net-zero<>zero-waste circular

**TASK:**  
creating the  
reflex

The traditional linear 'flow' of utilities, goods and materials to meet our needs



The more circular 'flow' of utilities, goods and materials to meet our needs



All generating hundreds of unaccounted for environmental impacts along the way that are cumulatively putting our health, wellbeing and future at risk



Begins to reverse the impact of hundreds of unaccounted for environmental costs along the way that have cumulatively put our health, wellbeing and future at risk



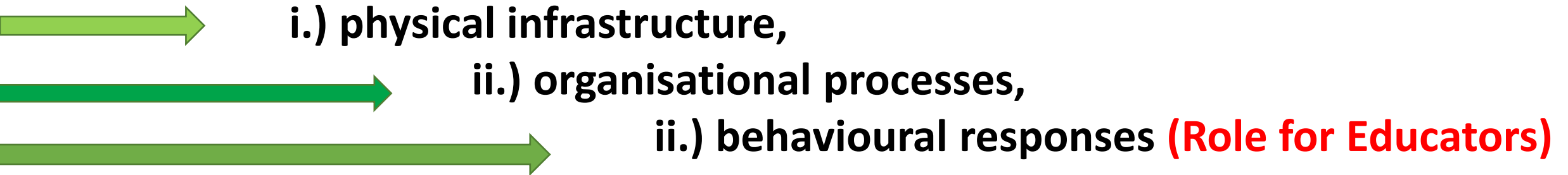
## Creating a Net Zero reflex





# Finding the Net Zero HOW in the East of England

For many years now (at least the last ten in the NHS) we have known what we need to do – the core required outcomes for carbon reduction and their translation into healthcare delivery. What has been missing is how to do this at scale across all aspects of healthcare delivery. **We are now looking at three main headings for change:**



The principle material progress has been made in terms of physical infrastructure – and then within the conventional **constraints of short-term payback** and **cost improvement**. The rapid shift to a net-zero ‘how’ hinges on urgently shaping NHS action plans into line with the transition from a high-carbon/high-waste (HC/HW) linear economy to a net-zero/zero-waste (NZ/ZW) circular economy. **This is something in which process and behaviour is as important as physical infrastructure.**


# Finding the WHO in the East of England



Identifying those **A**CCOUNTABLE for sustainability at Board Level



Identifying those **R**ESPONSIBLE for sustainability



Identifying key **C**ONTRIBUTORS

Contributors would include internal staff e.g. procurement, finance and HR leads for NHS organisations and STP'ICS's as well as partners such as Local authorities, PCN's, clinical networks ,professional bodies suppliers and of course **EDUCATORS**



# Finding the NHS Net Zero WHERE in the East of England

1. **Central England NHS (London) – NHS Chief Sustainability Officer, Greener NHS Team, NHSE/I National**
2. **EoE exec level Sustainability Leadership Group**
3. **EoE Regional Sustainability Network** (across region, currently hosted **EoE STPs and ICSs** (across six areas of the region and sub-regionally hosted by one of the partners). Some emerging NZ/ZW support and co-ordination within their sub-regional areas.
4. **EoE Trusts (26) and CCGs (20)** across region by local catchment with potential/real integration under the six sub-regional STPs or ICSs
5. **Numerous healthcare pathway specialties**, departments, clinics, wards and laboratories within Trusts and CCGs providing the front-line delivery of NZ/ZW through formal local policy and procedure or voluntary commitment and actions.
6. Other **bodies and partnerships such as PCN's, Local Authorities and suppliers & educators**

# Creating the Net Zero reflex - our recipe for success!

1. **Raise awareness & engagement** - get the message out there – the climate change crises was there before COVID and is still here now! Understand your commitments & responsibilities
2. **Normalize sustainability** - ensure its seen as everyone's job e.g. like Health & safety safeguarding E&D
3. **Improve accountability**- Every NHS organisation and STP/ICS to have Accountable and Responsible named leads
4. **Devolve responsibility & embed sustainability** in all aspects of how we train develop and performance manage our staff- make it part of every day conversation
5. **Review and adapt policies and procedures** to ensure sustainability is embedded in all decisions (challenge assumptions and old ways of working)
6. **Develop easy to use Life Cycle Assessment tools** – working out the true life cycle cost of things we consume
7. **Develop connecting budgets** making tomorrow's savings part of today's capital

# DEVELOPING A CARBON NET ZERO HERO!

The attitudes & behaviors required



# Characteristics of the Carbon Net Zero Hero!

Sees everything through a **sustainability lens** cannot make a decision without considering sustainability.

Is **brave** and not afraid to think differently and **ask questions**

Is **on a mission** and accepts responsibility

Is **visible** and not afraid to **champion** for sustainability

Is **ready to fly** into action and willing to consider **making changes to policies and procedures**



REDUCE... RE-USE...  
RECYCLE... & RETURN  
TO THE MANUFACTURING  
SUPPLY CHAIN

**Can connect budgets**

Can work out true cost of what we consume (Life Cycle Assessment)

**Can transform waste into useful material for others to use**

**SPECIAL POWERS**

# THE ROLE OF EDUCATORS IN A GREENER NHS

How can you help?





# Discussion & debate about how you can help?

How can you as educators help to embed these green 'Net Zero Hero' principles, attitudes and characteristics.

**STEP 1-** Choose 1 of the 3 break out rooms

1. Curriculum design
2. Supervision
3. Quality Improvement



**STEP 2** – Discuss in your group what could you do differently in future to embed sustainability. **Identify 3 actions-** be ready to share with the whole group if there is time but capture thoughts on your chat in your break out room.



**STEP 3-** Discuss in your group what further information or support you might need to carry out the actions you identified above?

# NHS

**Thank you**

Happy to take  
questions or discuss  
further please get in  
touch



***Stella Cockerill :***

NHS Sustainability Programme Lead for the  
East of England [stella.cockerill@phe.gov.uk](mailto:stella.cockerill@phe.gov.uk)

***Jan Yates:***

Health Education East of England, Head of  
School, Public Health [jan.yates@hee.nhs.uk](mailto:jan.yates@hee.nhs.uk)



East of England  
Regional Sustainability Network

# Useful links- following our break out room discussions

1. Read the Net Zero report <https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/>
1. **Greener NHS** <https://www.england.nhs.uk/greenernhs/>
2. **Green Impact-** tool to help teams improve their sustainability (specific one for GP's and Dentists but also used by hospitals and other businesses- <http://greenimpact.nus.org.uk/www.greenimpact.org.uk/dentists>
3. **Centre for Sustainable Health Care-** networks research, advice training <https://sustainablehealthcare.org.uk/>
4. **Centre for Sustainable Health Care** Quality Improvement tools <https://www.susqi.org/>

