



SUSTAINABILITY IN DIETETICS

MAKING INFORMED PRODUCT CHOICES AND
FACILITATING CHANGE IN HEALTH CARE



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PEOPLE
INTRODUCTIONS



Dr Anne Holdoway

Webinar Host



Ross Primmer

Presenter



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Presenter



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Presenter

SUSTAINABILITY IN DIETETICS

CONTENT



- Targets
- Understanding sustainability
- Analysing a product
- Facilitating change
- Questions

WHO ARE
ACTION SUSTAINABILITY?



SUSTAINABILITY DRIVERS



UK

Achieve net-zero greenhouse gas emissions by 2050

NHS

- NHS Carbon Footprint: Net zero by 2040
- NHS Carbon Footprint Plus (including supply chain emissions): Net zero by 2045
- NHS Clinical Waste strategy: 100% of NHS trusts and foundation trusts to have waste managers by 2023
- NHS BSA:
 - Reduce water consumption by 40% from 2025
 - Achieve a biodiversity net gain across its estate by 2025
- NHS Procurement: From April 2022 all NHS procurements must include a minimum 10% net zero and social value weighting

Industry / BSNA

Companies are committed to producing recyclable packaging and producing as little waste as possible working towards becoming 100% recyclable.

<https://www.england.nhs.uk/publication/nhs-clinical-waste-strategy/>

<https://www.nhsbsa.nhs.uk/what-we-do/safety-health-and-environment/our-environment-strategy-2022-2025/our-core-priorities>

<https://www.england.nhs.uk/greenernhs/get-involved/suppliers/>

UNDERSTANDING **SUSTAINABILITY**

Sustainable development:

**“Meeting the needs of today
without compromising the
needs of tomorrow”**

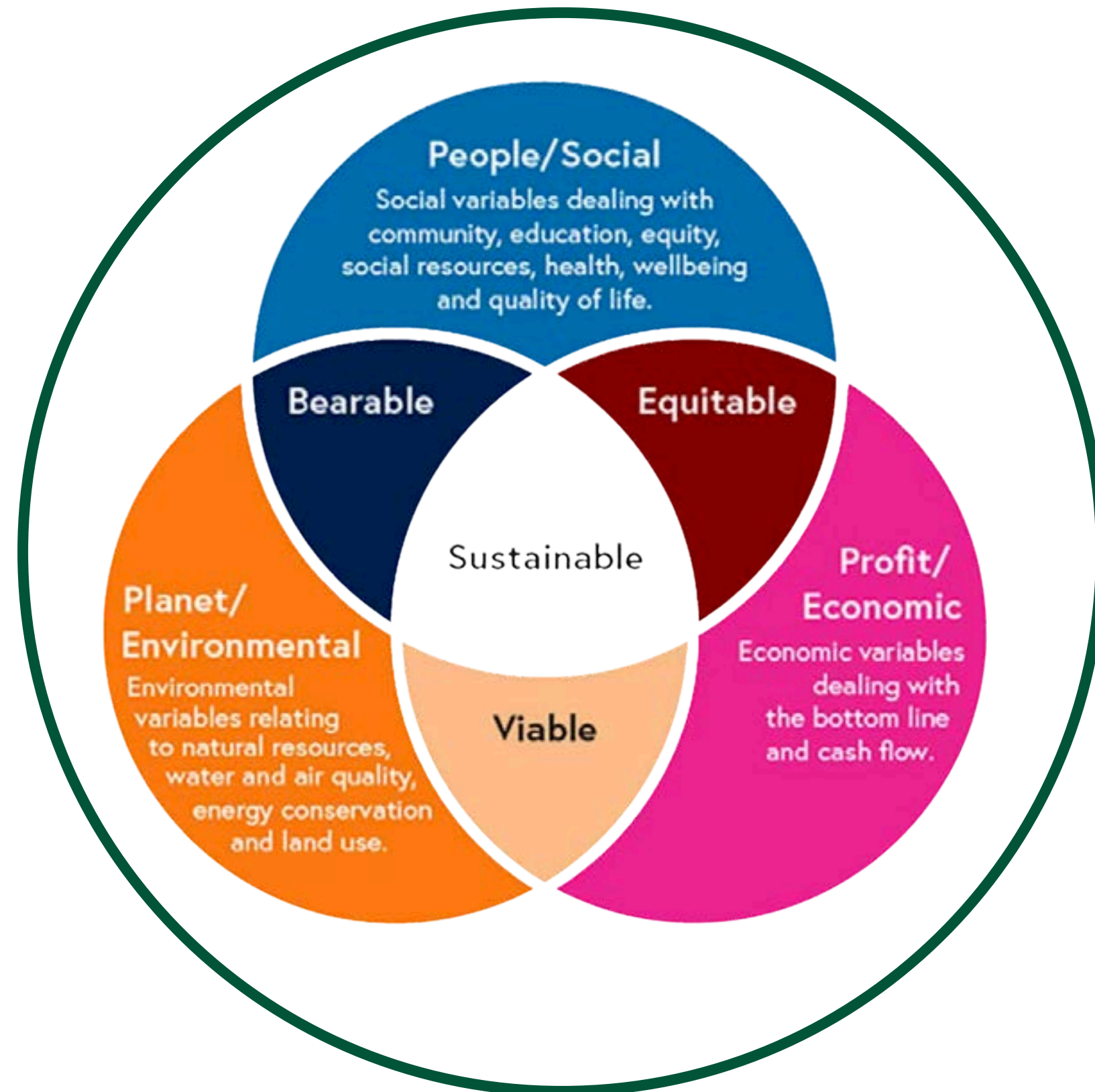
Brundtland 1987¹



UNDERSTANDING SUSTAINABILITY

THE THREE PILLARS

- People / Social
- Planet / Environmental
- Profit / Economic



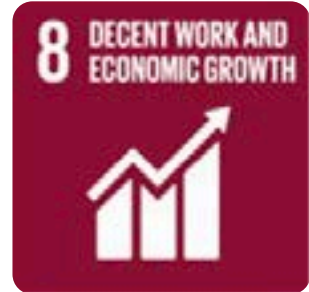
UNDERSTANDING SUSTAINABILITY

SUSTAINABLE DEVELOPMENT GOALS

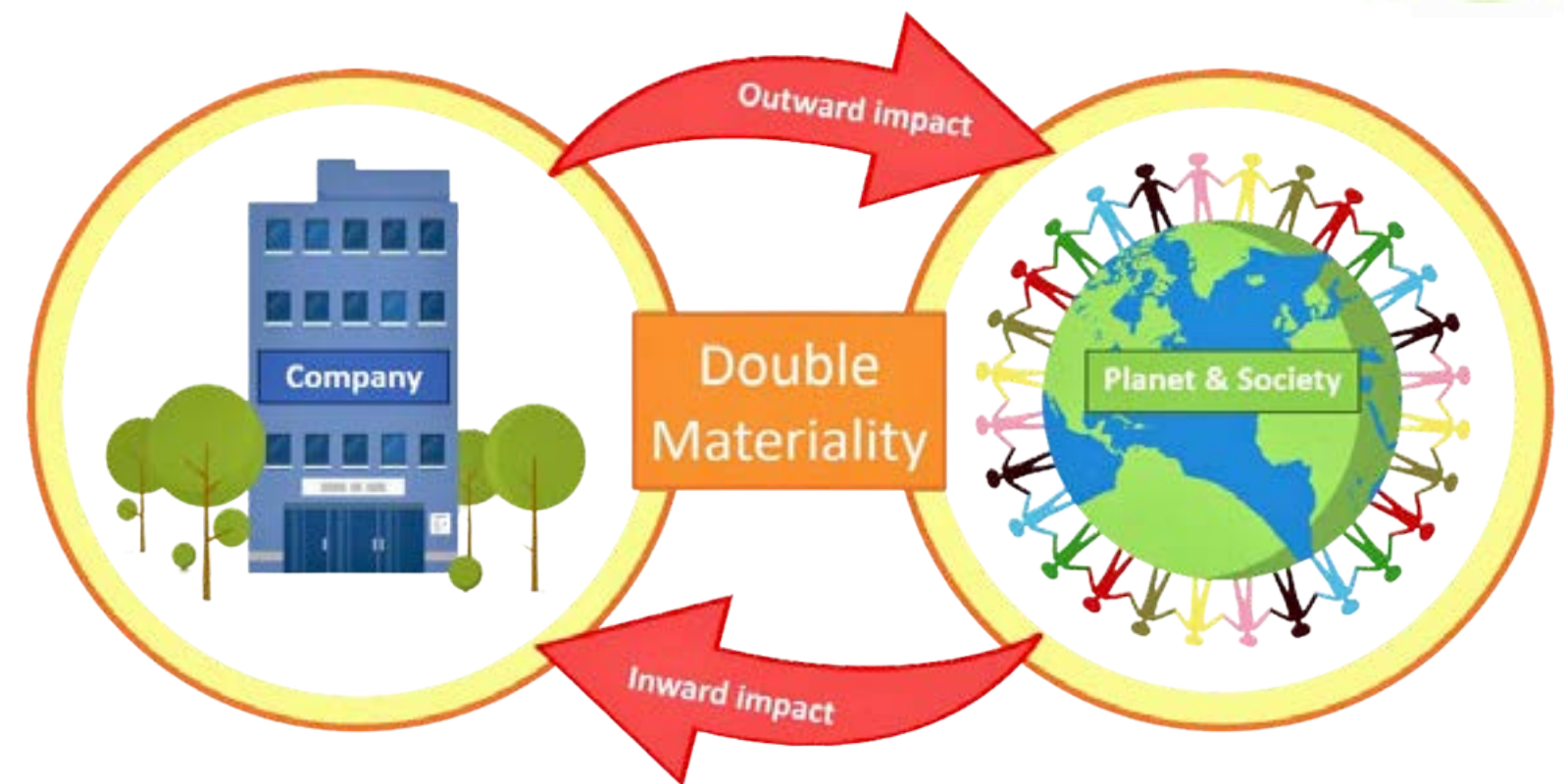
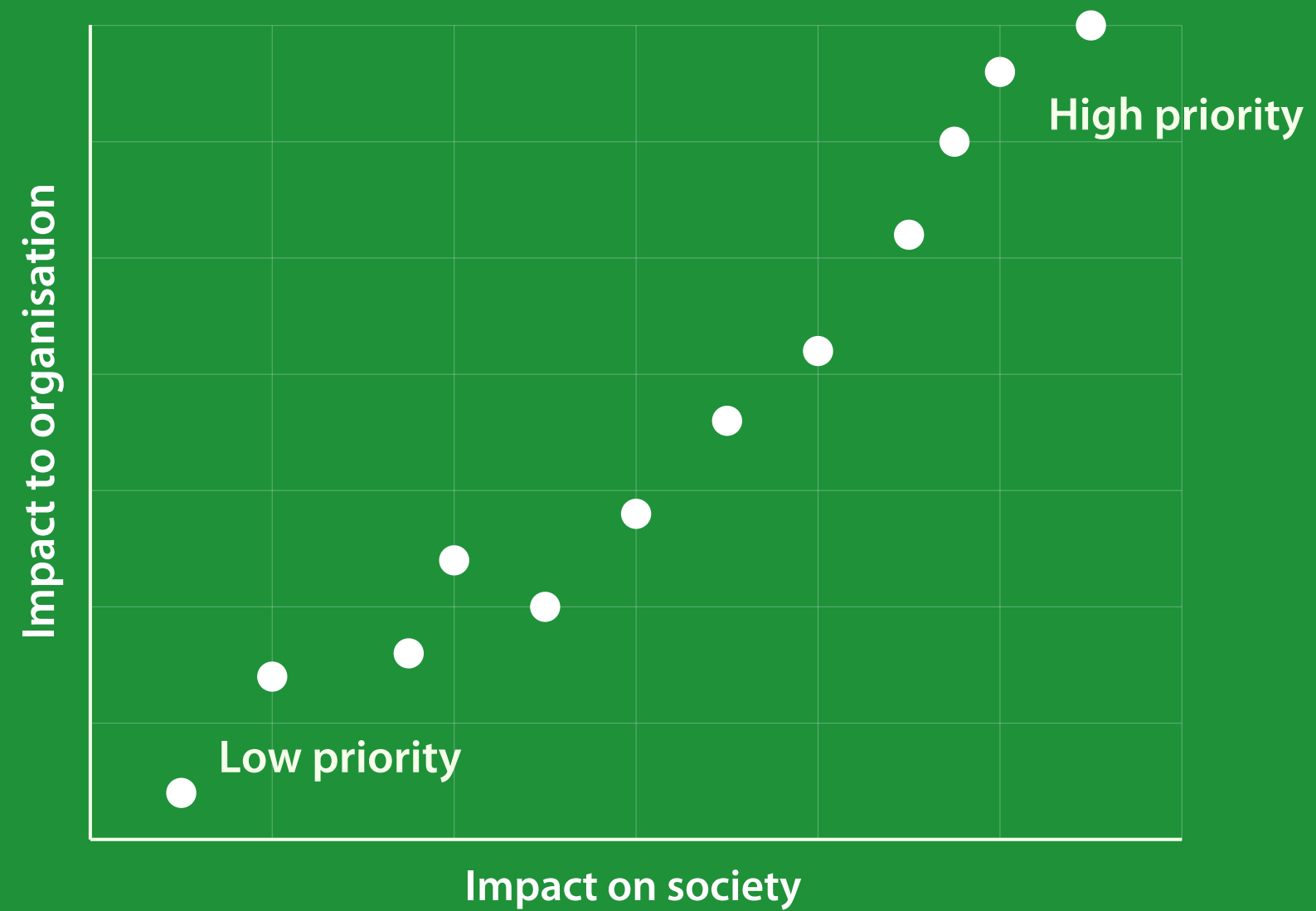


United Nations: Department of Economic and Social Affairs Sustainable Development
<https://sdgs.un.org/goals>

UNDERSTANDING SUSTAINABILITY
PRIORITISATION IS KEY



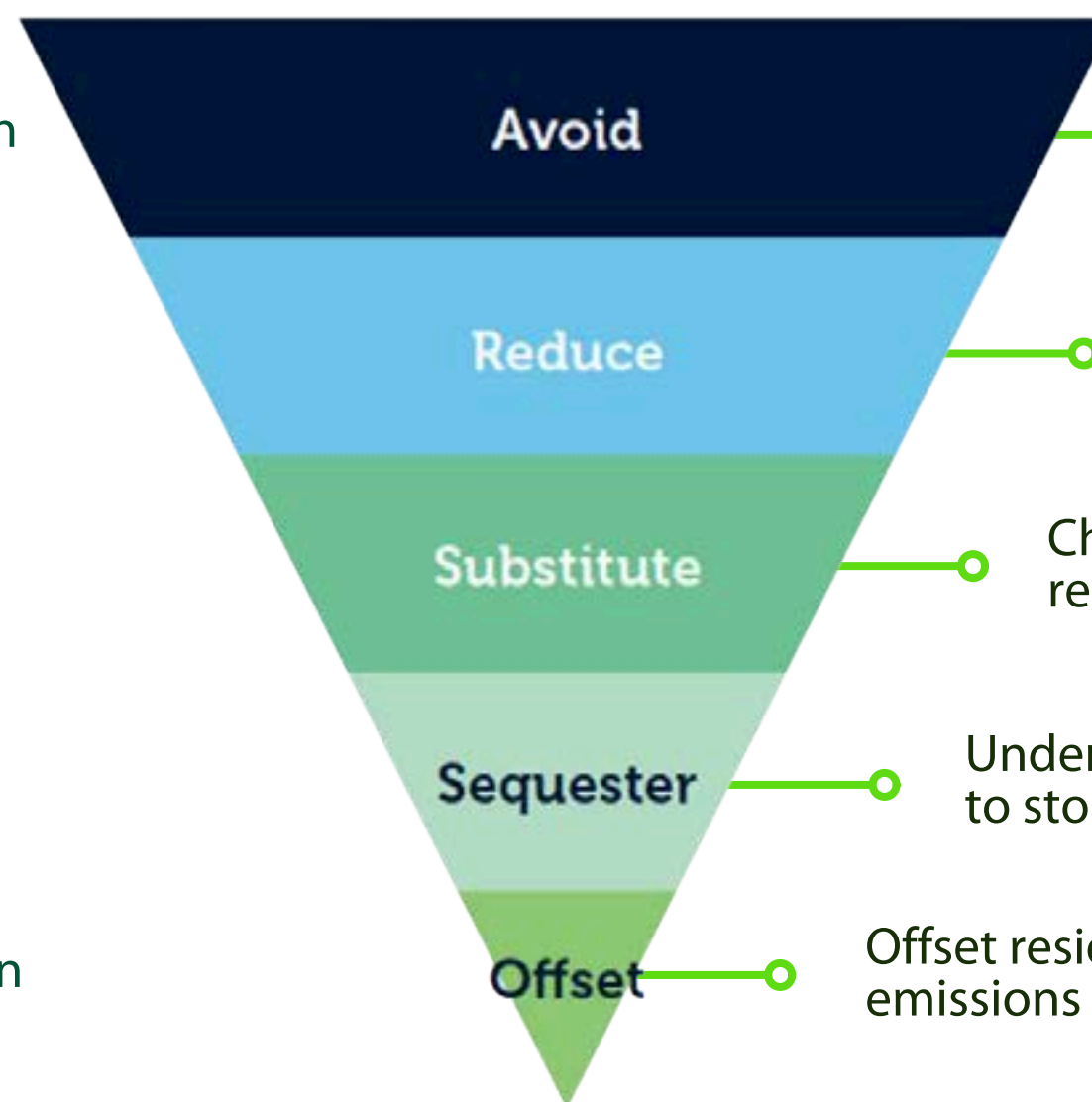
UNDERSTANDING SUSTAINABILITY PRIORITISATION



CARBON HIERARCHY

Most favoured option

Least favoured option



Avoid

Avoid activities that cause emissions

Reduce

Change activities to reduce emissions

Substitute

Change sources to reduce emissions

Sequester

Undertake activities to store emissions

Offset

Offset residual emissions



WASTE HIERARCHY



PRODUCT ANALYSIS

PACKAGING

Product example:



SOCIAL

- Providing essential nutrition for patients with serious illness
- Easy to use / administer for any demographic



ECONOMIC

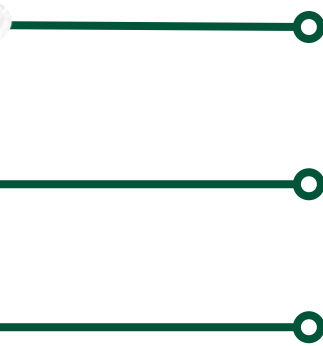
Packaging best aids longevity of product
– reducing the possibility of waste product.

Space efficient, reducing shipping costs.

PRODUCT ANALYSIS

PACKAGING

Product example:



ENVIRONMENT

Recyclable plastic container

Cup >50mm aiding recycling²

Lightweight container reduces carbon 'cost' of shipping



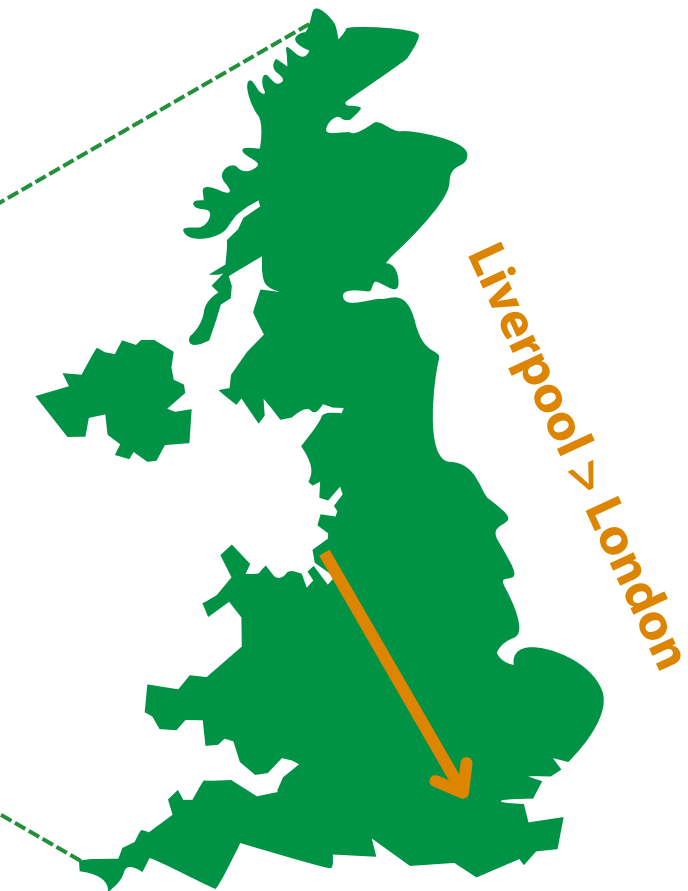
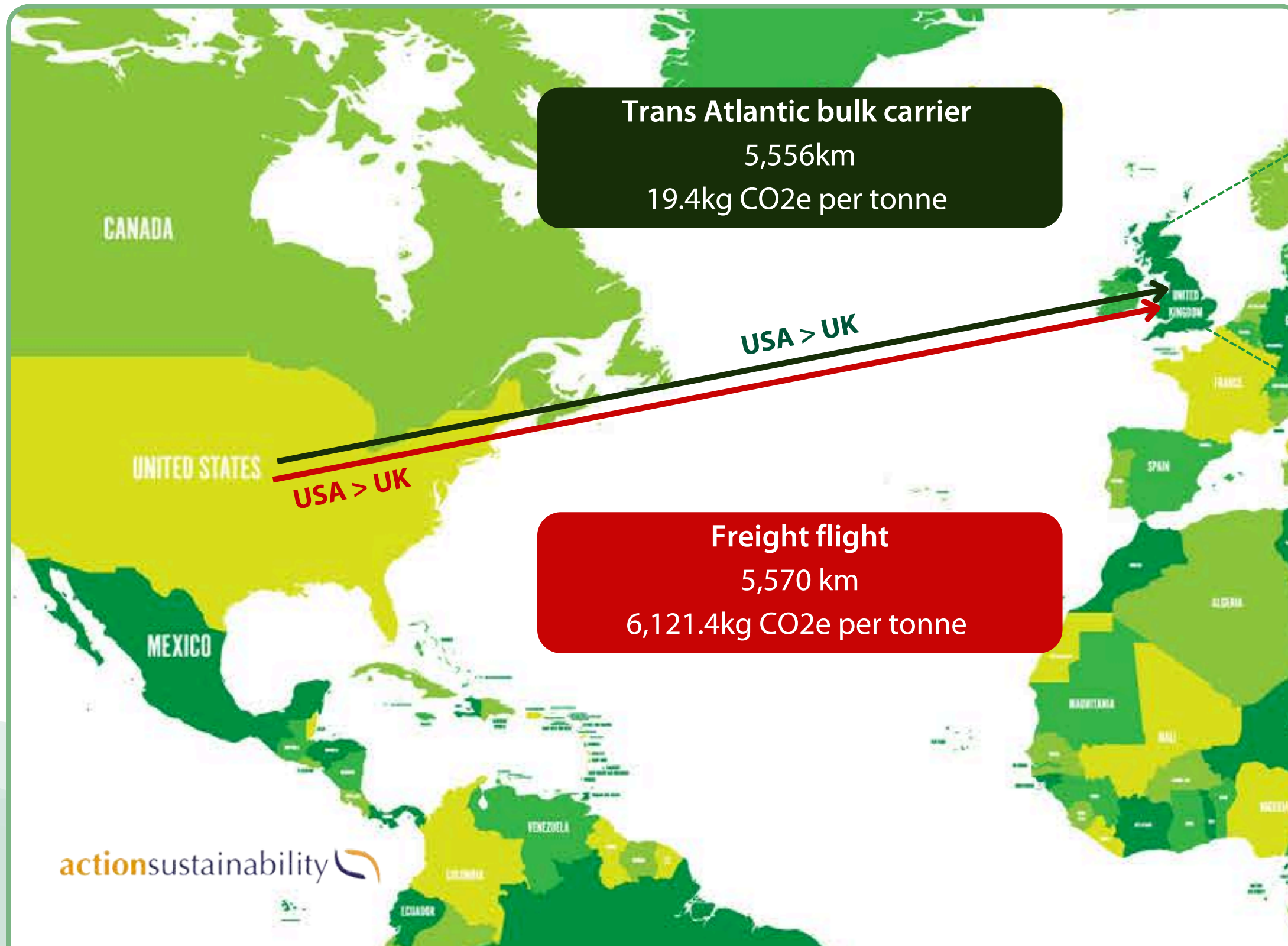
Recyclable waste processing

A Trommel screen uses a cylindrical drum with perforated holes of varying sizes, through which materials are sorted by size as the drum rotates.

Items with a diameter >50mm typically go to landfill or are incinerated for energy.

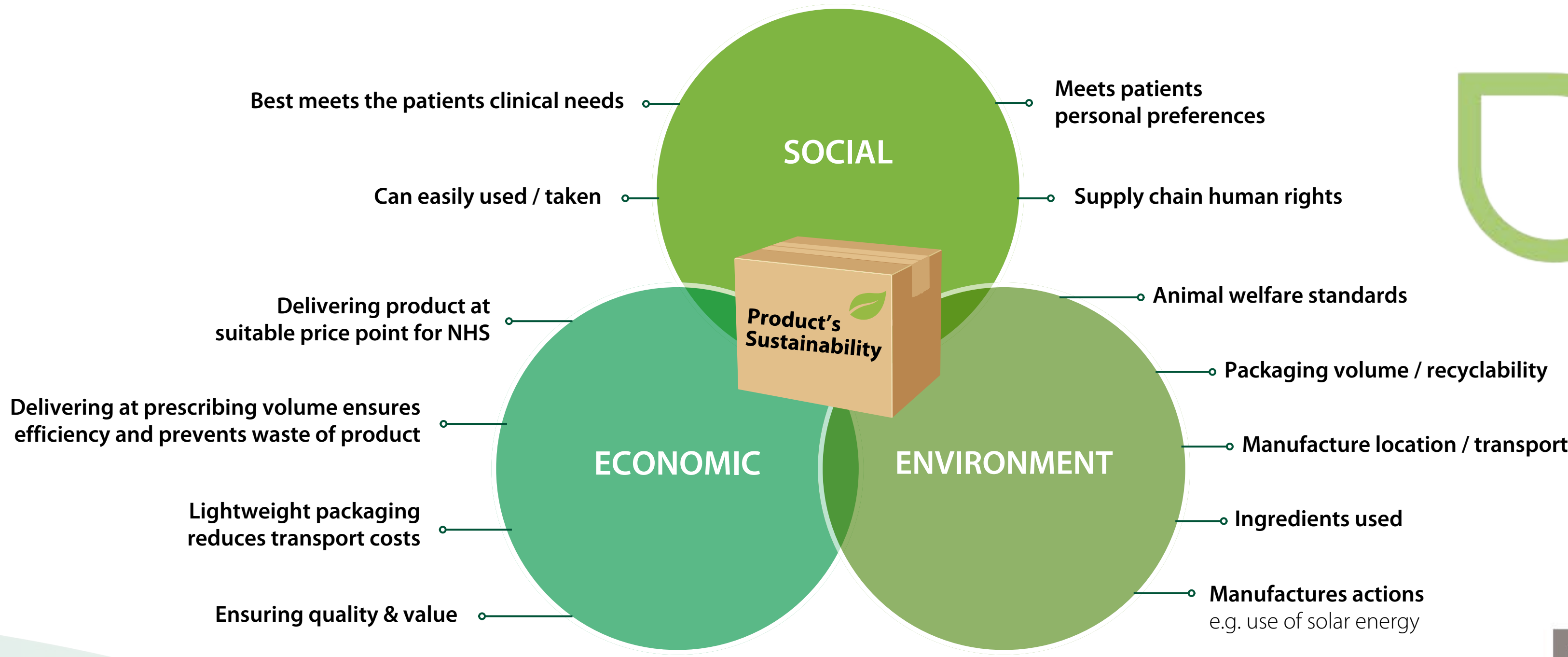
PRODUCT ANALYSIS

TRANSPORT



287km
HGV – 24kg CO2e per tonne
Rail – 7kg CO2e per tonne

THINKING THROUGH THE LENS OF **THE THREE PILLARS**



SUSTAINABILITY SUMMARY

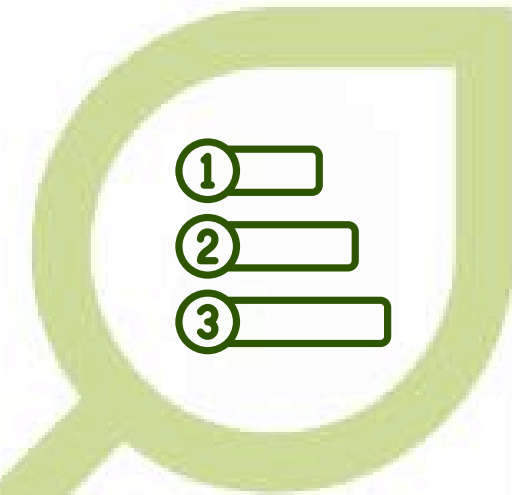


A sustainable approach considers environmental, social and economic impacts

Sustainability presents business opportunities and risks



Prioritisation is key



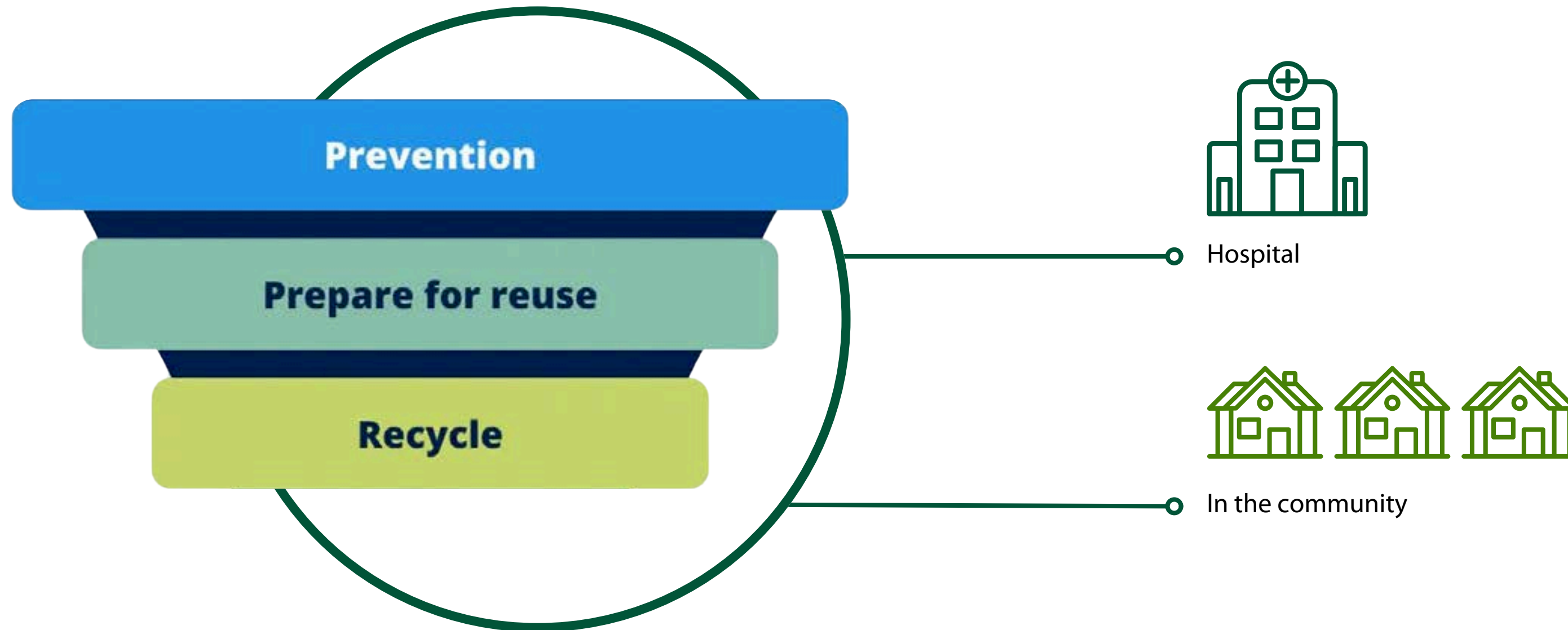
There are various ways to define sustainability such as the 3 pillars and UN SDGs



A decision making hierarchy is a good way to structure your approach



MAKING AN INSTANT IMPACT IN **DIETETIC PRACTICE**



RUTH CHALKE

BDA SUSTAINABLE DIETS GROUP

About Ruth:

Ruth is a dietitian who has worked in the NHS for 10 years across various specialisms, including Upper GI Surgery and Prescribing Support. She co-leads the Green Team for her department and is a member of a 'Reducing Single-Use Plastics Working Group'. She is Resource Officer for the BDA Sustainable Diets Group, and wrote an article for Dietetics Today magazine, looking at the environmental impact of Oral Nutritional Supplement packaging.



ORAL NUTRITIONAL SUPPLEMENTS

Oral Nutritional Supplements (ONS)

→ Address nutritional deficiencies

300,000

Prescribed each year

Multiple components



Bottles



Pots



Cups



Sachets



Lids: hard / peelable



Seals (under lids)

PLASTIC RESIN ID'S

Materials used for each component varies between manufacturers

Resin ID's categorise plastic into 'types'

- Ensures consistency in manufacturing and recycling ability
- Numerical indicators (1-7) indicate plastic material used



Learn more: <https://www.recyclenow.com/how-to-recycle/recycling-symbols>



COMMON PLASTICS IN MEDICAL NUTRITION



ONS



PET (Polyethylene Terephthalate)

Uses: Bottles for liquid nutrition, sterile packaging.
Widely recycled: **Can be recycled 1-2 times**



HDPE (High-Density Polyethylene)

Uses: Bottles for nutritional supplements, containers for medical liquids.
Widely recycled: **Can be recycled 7-10 times**



PP (Polypropylene)

Uses: Syringes, caps, containers for medical liquids.
Widely Recycled: **Can be recycled 5-7 times**

Other



LDPE (Low-Density Polyethylene)

Uses: Flexible tubing, squeezable bottles.
Moderately recyclability: **Can be recycled 4-5 times with quality loss**



PVC (Polyvinyl Chloride)

Uses: IV bags, tubing, blood bags.
Limited Recyclability: **Can be recycled 7-8 times - but with significant challenges**

COMMON PLASTICS IN MEDICAL NUTRITION



Not locally recycled

'Other'

Plastic Packaging:

- Single-use containers for enteral nutrition
- Plastic film wrapping for sterile products

Blister Packs:

- Used for packaging of supplements and medications

Composite Materials:

- Nutritional supplement sachets combining plastic, foil, and paper
- Tetra Pak bottles



Sachets

Ready-to-use and powdered

ONS

- Paper, aluminium, plastic laminate coatings
- Preserve, seal, brand

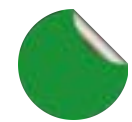
However

- Some accepted in 'soft plastics' recycling bins

Life Cycle Analysis

- Less energy, raw materials and water
- Weigh less
- Smaller volumes vs liquid supplement
- Reduced transport costs, carbon emissions, waste volume

CORRECT DISPOSAL OF ONS PRODUCTS



Discard seals



Rinse ONS bottles → squash → screw the lid back on



Remove labels / collect sachets → 'soft plastics' recycling bin



Avoid recycling contamination

Non recyclables:

- Clinical waste
- Items contaminated by food e.g. oil on cardboard
- Small items with a diameter of <50mm



OTHER CLINICAL CONSIDERATIONS



Reduce Waste

- Sample services
- Acute scripts
- Measurable outcomes



Patient communication

- Advise best way to dispose of products



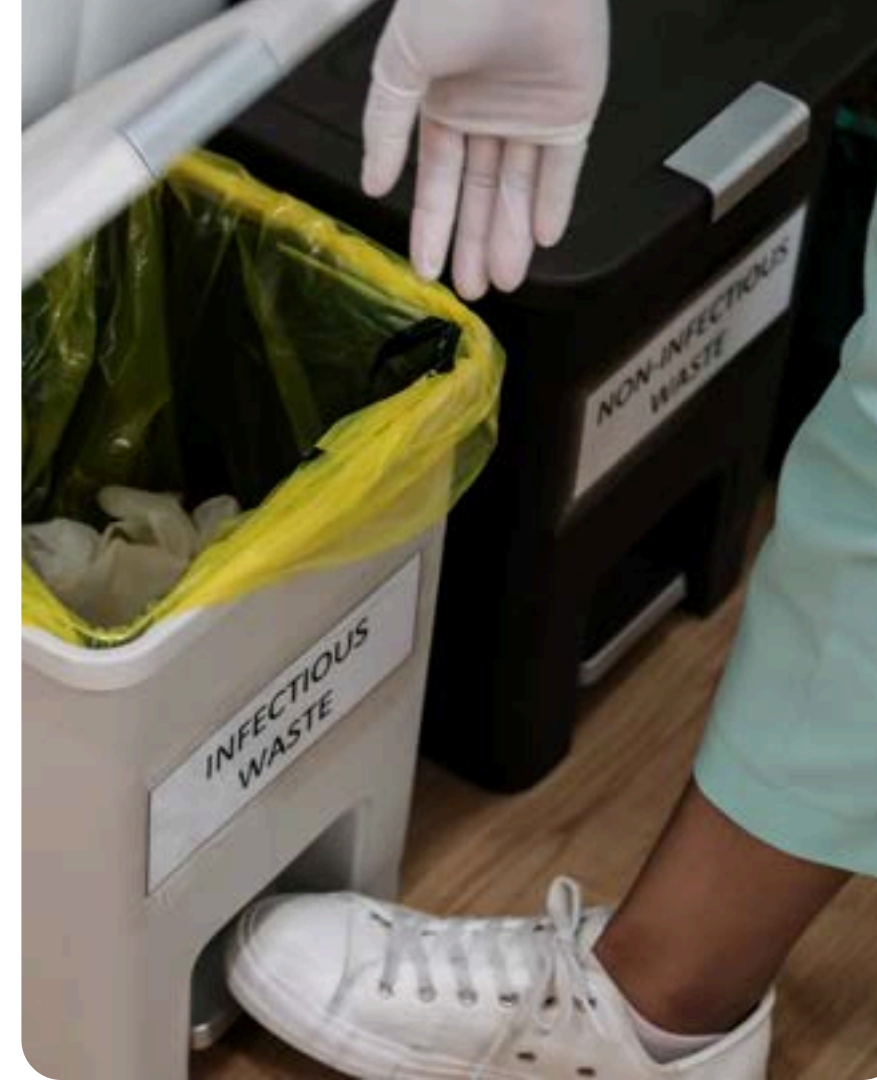
On pack recycling

- Coming soon...
- On pack recycling guidelines & logos (QR code)



Useful resources

Recycle Now - Recycling Locator³



3. <https://www.recyclenow.com/recycling-locator>

RECYCLING

WHICH BIN DO WE USE?

Most clinical settings will have a variety of different coloured bins to separate different types of waste.



Clear (or white) bin bags = Recycling!

- Empty plastic cups, bottles and containers
- Empty aluminium and steel drinks and food cans
- Clean wrappers and packaging, most soft-density plastics
- Paper and card



Black bin bags = General Waste

General waste should contain no recyclable materials, batteries or electrical equipment



Orange, yellow or 'tiger' (striped black and yellow) bin bags = Infectious Waste

Infectious waste only - such as dressings, swabs and used PPE



Blue Bin bags = Non-Hazardous Medicinal Waste

Non-hazardous pharmacy and medicinal waste such as surplus medicines



ROSA HOLT

BDA SUSTAINABLE DIETS GROUP

About Rosa:

Registered Dietitian and BASiS
registered Environmental Advisor.
Focused on sustainable dietary
diversity and agroecology

 @foodandfarmingdietitian





**RECYCLE PLASTIC,
IT'S FANTASTIC**

'THE CLIMATE AND ECOLOGICAL EMERGENCY IS A HEALTH EMERGENCY'

NHS Scotland Climate Emergency and Sustainability Strategy 2022-2026⁴
Scottish Government Plan for NHS Scotland being a net zero healthcare service by 2040

NHS Grampian Plan for the Future 2022 – 2028⁵
Legislative requirement to deliver net zero carbon service, recycling can be a simple and effective way to achieve this.



4. <https://www.gov.scot/publications/nhs-scotland-climate-emergency-sustainability-strategy-2022-2026/>
5. <https://www.nhsgrampian.org/about-us/planforthefuture/>



stv News

that's tv

BBC NEWS

BDA The Association of UK Dietitians
Sustainable Diets
Specialist Group

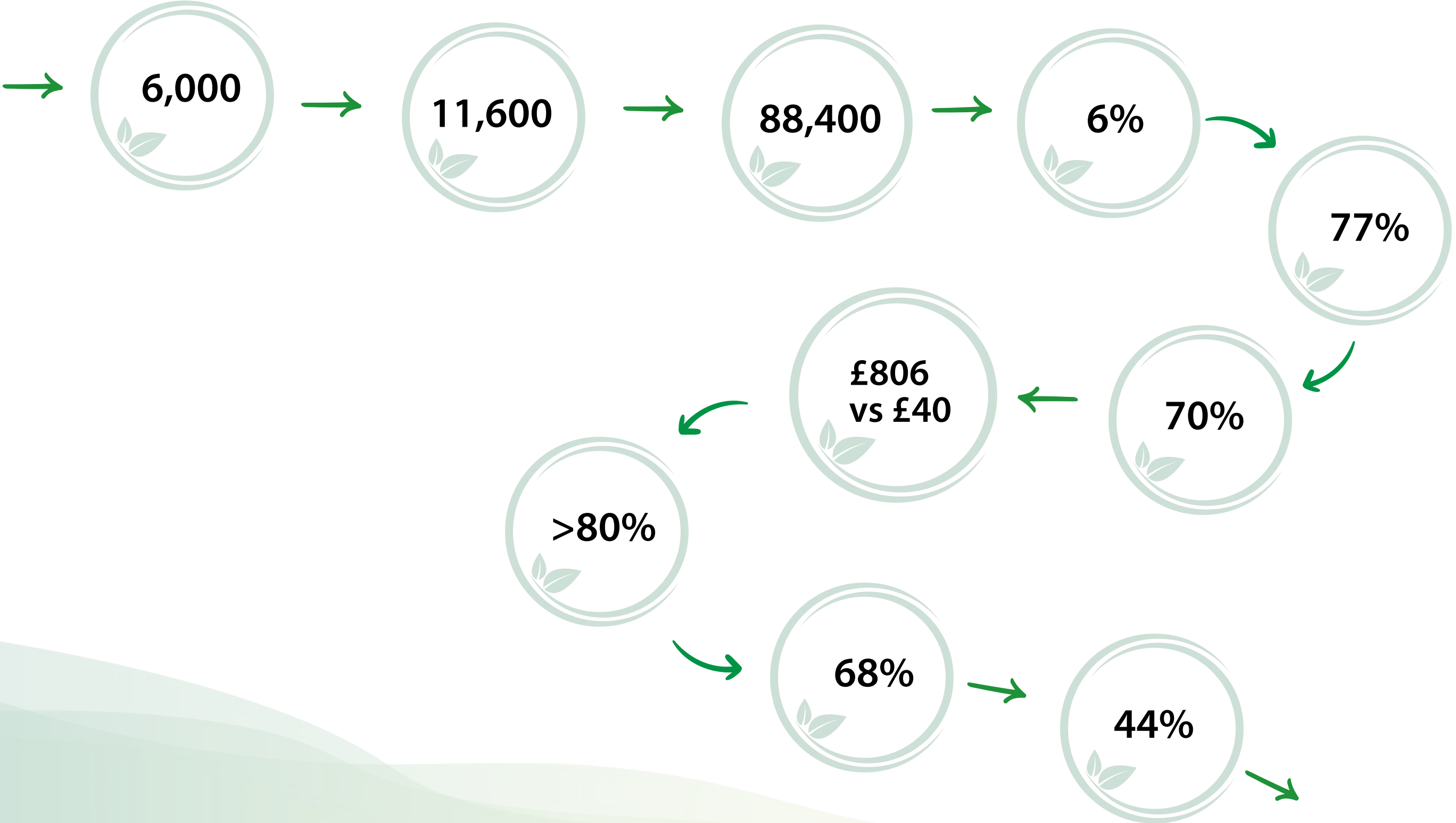
Public Health Scotland

TURAS | Learn

NHS GRAMPIAN



A STORY WRITTEN BY NUMBERS



SIGNPOSTING CHANGE IN THE HOSPITAL

Working with companies to develop recycling posters and signposting.

**Recycle Plastic,
it's Fantastic!**

**NHS
Grampian**

Administration Guidelines

1. Remove cap from TF ENFit pouch
2. Attach TF ENFit pouch directly to patient's enteral feeding tube, or the drug port on their enteral giving set
3. Gently squeeze the pouch to deliver the contents

Note: We recommend flushing the patient's feeding tube with water both before and after the addition of ProSource TF ENFit.

**RECYCLE
SOFT PLASTIC** ♻️

Recycle cap on

For the Dietary Management of Hypoproteinaemia
PROSourceTF
A High Protein Liquid Supplement ENFit®
20 grams of protein
70 calories
• Food for special medical purposes
• For enteral use only
• Lactose, gluten & milk free
• Halal certified
Unflavoured
Net Content: 500ml
Item 11440

The poster features a central illustration of a ProSource TF pouch attached to a feeding tube. A purple cap is shown being removed from the top of the pouch, with arrows indicating the direction of removal. The pouch is white with blue and green accents. The background is a teal color with a purple header and footer.





<https://www.youtube.com/@nhsgrampian/videos>



DIETETIC SUMMARY

One of the easiest ways in which we can make an immediate difference on environment is by reducing any unnecessary waste and by increasing how much we recycle.

REDUCE

- Use product samples and sample services prior to prescribing
- Consider utilising products that mitigate the need for additional ancillaries
 - such as single-use cups for decanting
- Utilise acute scripts

RECYCLE

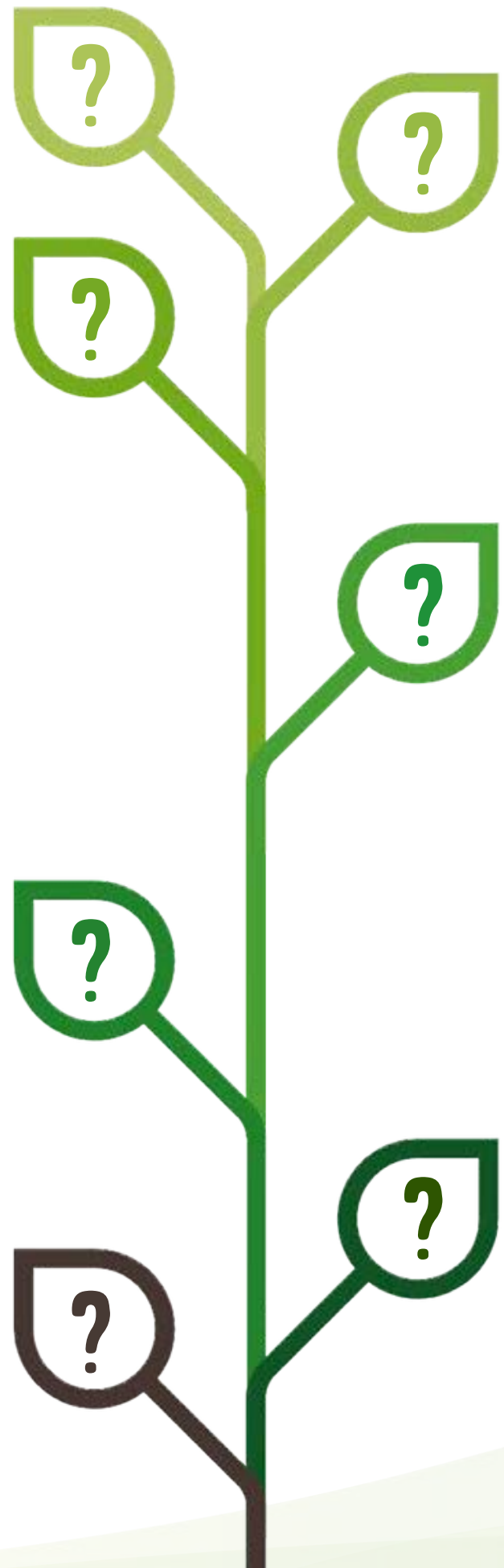
- ♻️ If you do not currently have recycling facilities in wards, consider contacting your local waste management team.
- ♻️ **Where recycling is possible, remember...**
 - Check it's recyclable - plastic type
 - Avoid recycling contamination - product residue or <50mm
 - Remove labels & seals
 - Collect up soft plastics and take to local recycling point

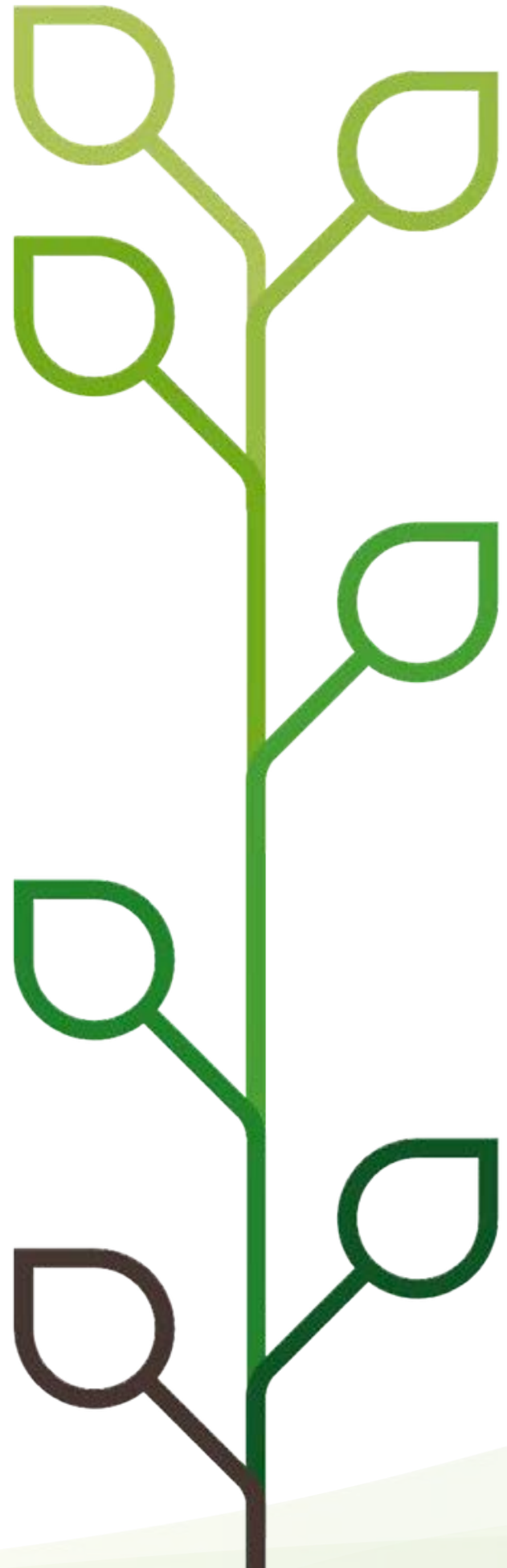


www.recyclenow.com/recycling-locator

QUESTIONS & POLL

REVIEWED BY OUR EXPERT PANNEL





THANK YOU

nutrinovo.com/sustainability

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