



Sustainable Health Care

Debbie Wilson
Sustainability Officer
Doctoral Candidate (AUT)



Co-advisors: Peter Larmer ¹, Coral Ingley ², Alain Vandal ³.

1. School of Rehabilitation and Occupational Studies AUT
2. Business School AUT
3. Joint appointment with the AUT School of Public Health and Psychosocial Studies and CMDHB

Responding to climate change:
Sustaining health and wellbeing
PHSS, University of Otago, Wellington
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Introduction

Context

- Triple aim
- Local
- National
- DHB
- CEMARS
- GGHH

The Issue

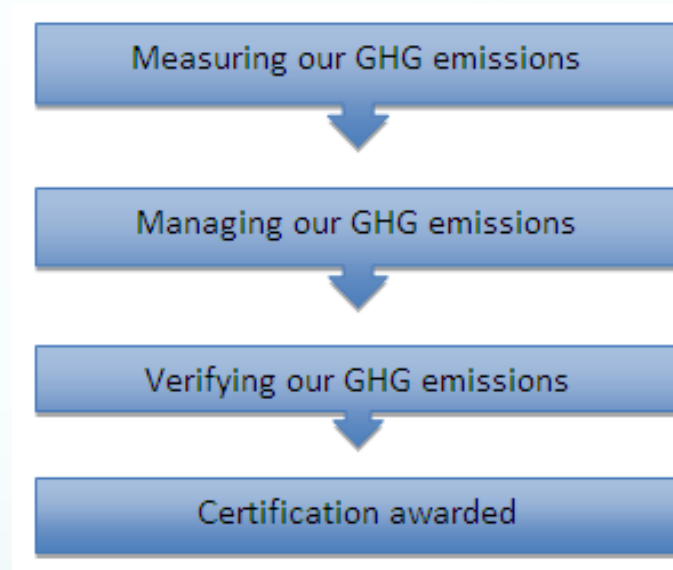
- Sustainable health care
- Organisational strategy
- New Zealand
- Frameworks

Goal	Year commenced
Leadership- Prioritising environmental health	2013
Waste- Reduce and safely dispose of waste	2013
Transportation- Improve transportation choices for patients and staff	2013
Energy- Implement energy efficiency and purchase clean renewable energy	2013
Purchasing- Purchase safer and more sustainable services and products	2013
Food- Treat food and its production and distribution as preventive medicine that protects the health of patients, staff, and communities	2014
Buildings- Support green and healthy hospital design and construction	2014
Chemicals- Substitute harmful chemicals with safer alternatives	2014
Water- Reduce hospital water consumption	TBC
Pharmaceuticals- safe management and disposal of pharmaceuticals	TBC

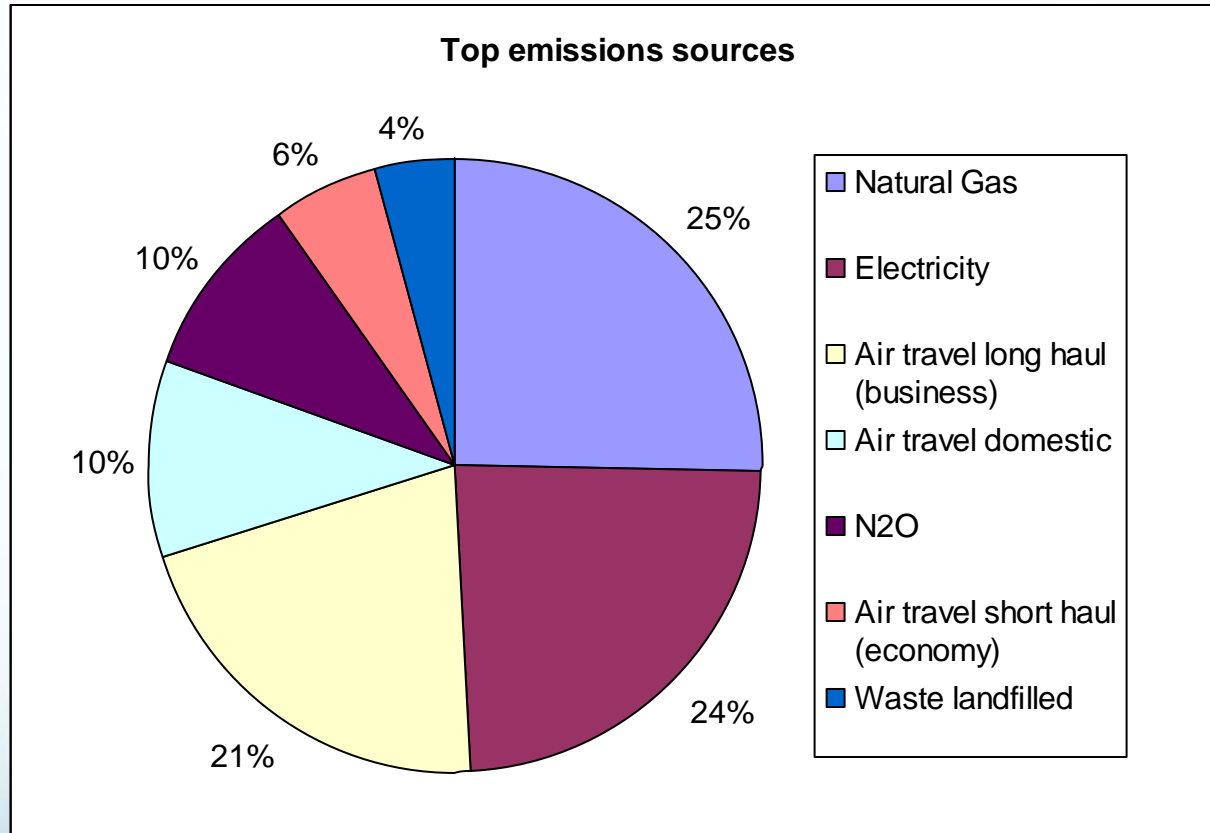
GGHH Framework

Measurement

- Problem
- Plan
- Transparency

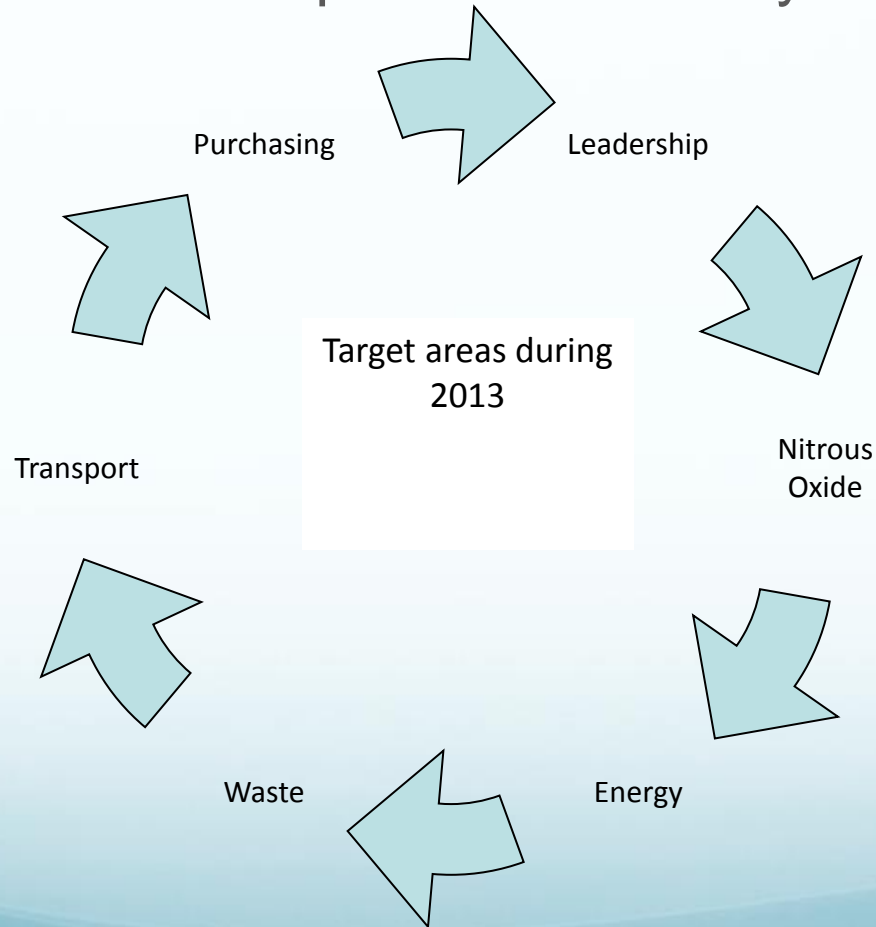


Counties top emissions sources for 2013



Management

20% footprint reduction by 2017



Nitrous Oxide

- Nitrous oxide is 310 times more potent than carbon dioxide.
- 90% of this amount can be attributed to O&G.
- Some argue occupational exposure to nitrous oxide may adversely affect a woman's fertility.
- Small research project is currently underway

Energy

- Middlemore Hospital and Manukau Health Park consume enough power in a year to generate the electricity required for 2,450 homes.

(Based on the average household consuming 11,000 kWh per year of electricity)



Middlemore Hospital
houses over 2,800
computers

Each computer should
save somewhere in the
region of \$20-50 per
annum (\$50,000)

Waste

- Counties produced 1,719 tonnes of general and medical waste in 2013.
- 2% reduction of total general waste volume between 2012 and 2013
- 1% reduction of medical waste
- Recycled 12% of our total waste volume during 2013, largely due to extensive cardboard recycling.

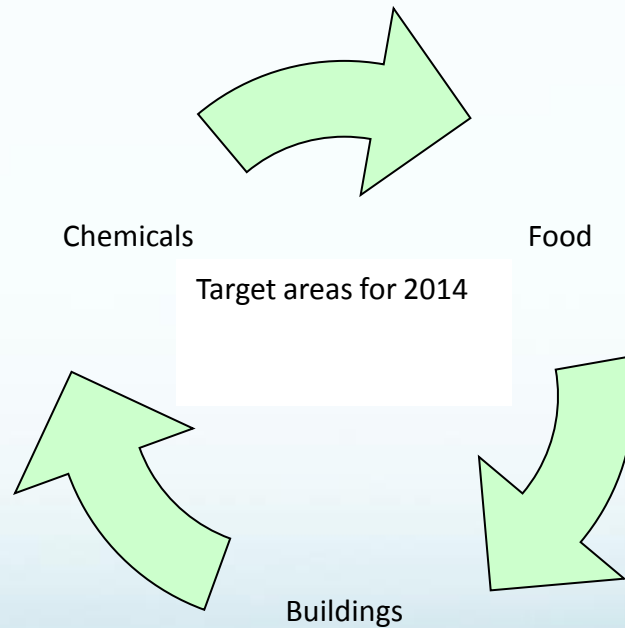
Waste

- Hand dryers
- Composting
- Desk top cubes
- CUP Campaign

Management

‘Greening’ health care 2014

- Continue making progress with aforementioned projects plus.....
- (Fleet)

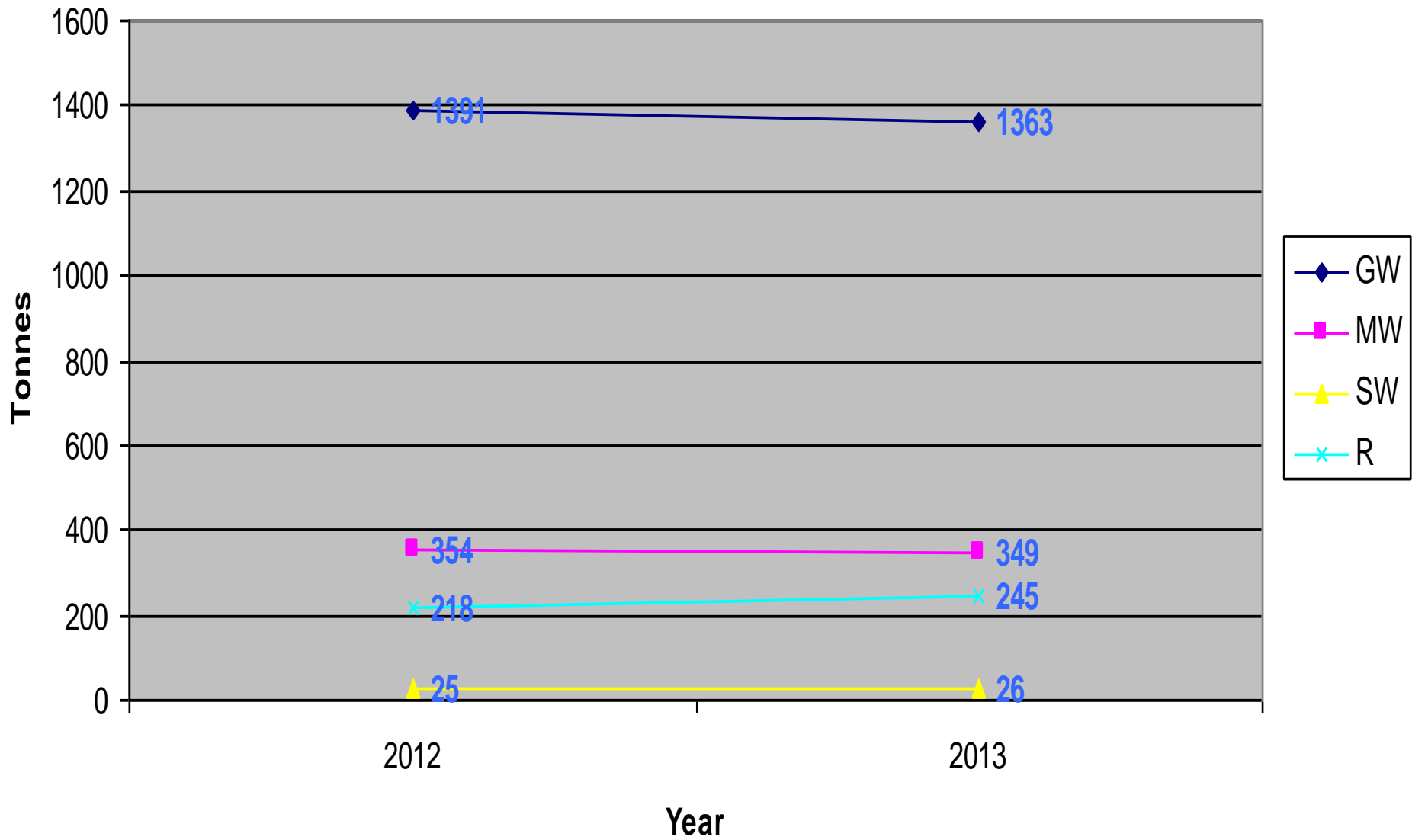


Benchmarking

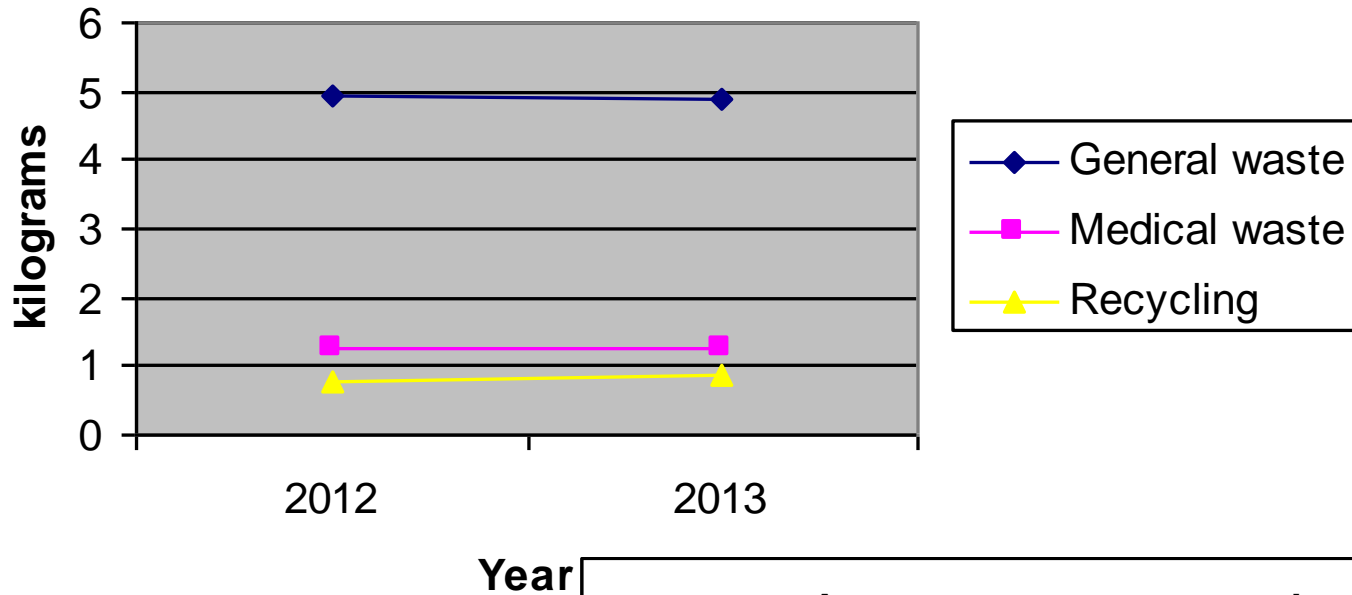
Baseline data

- Carbon/\$ turnover
- Carbon/total beds
- Energy
- Waste

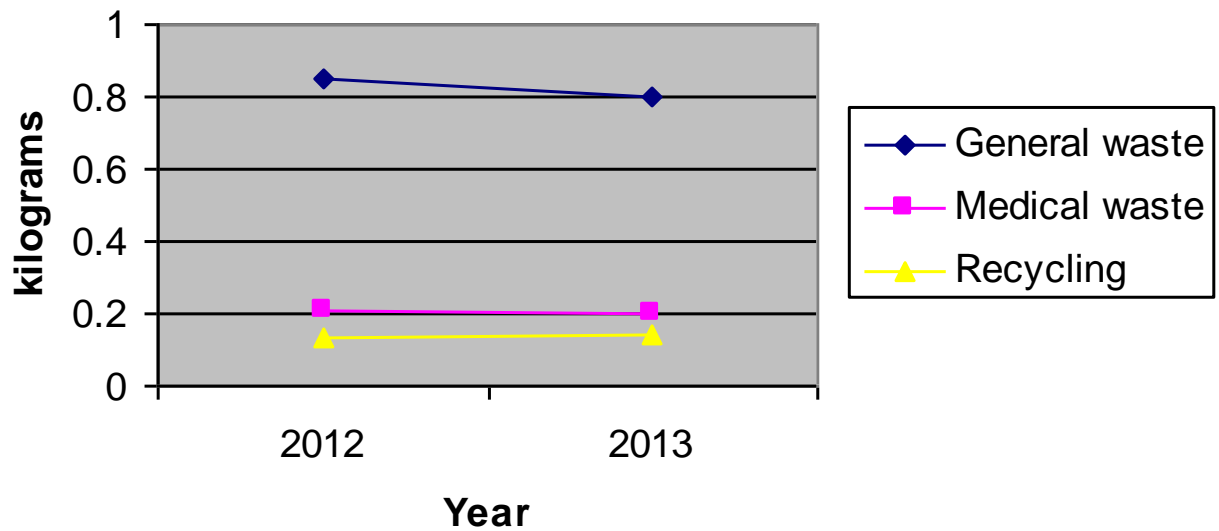
Waste volumes by type per year, per tonne.



Average waste generated per patient bed day

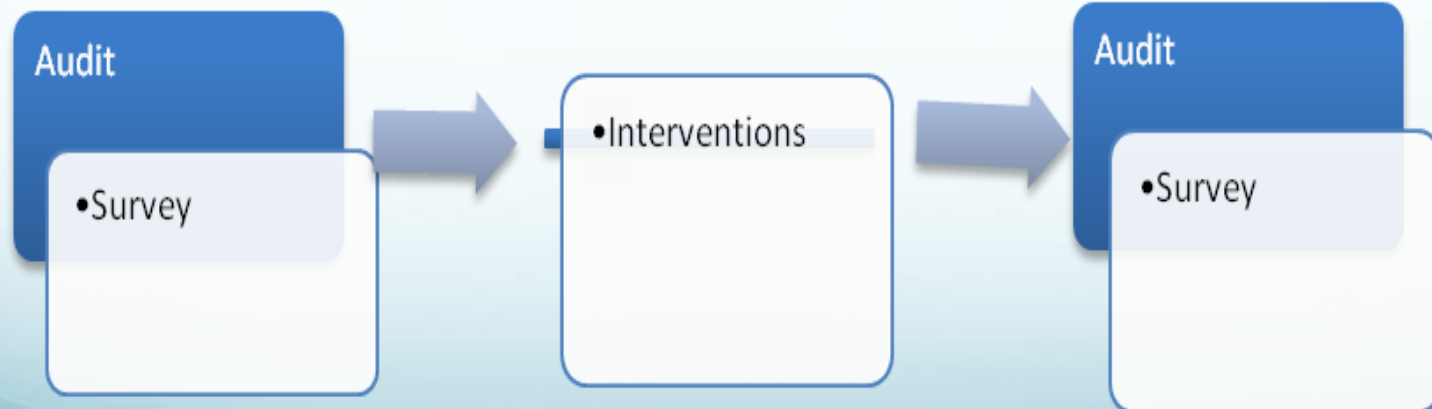


Average waste generated per day per FTE

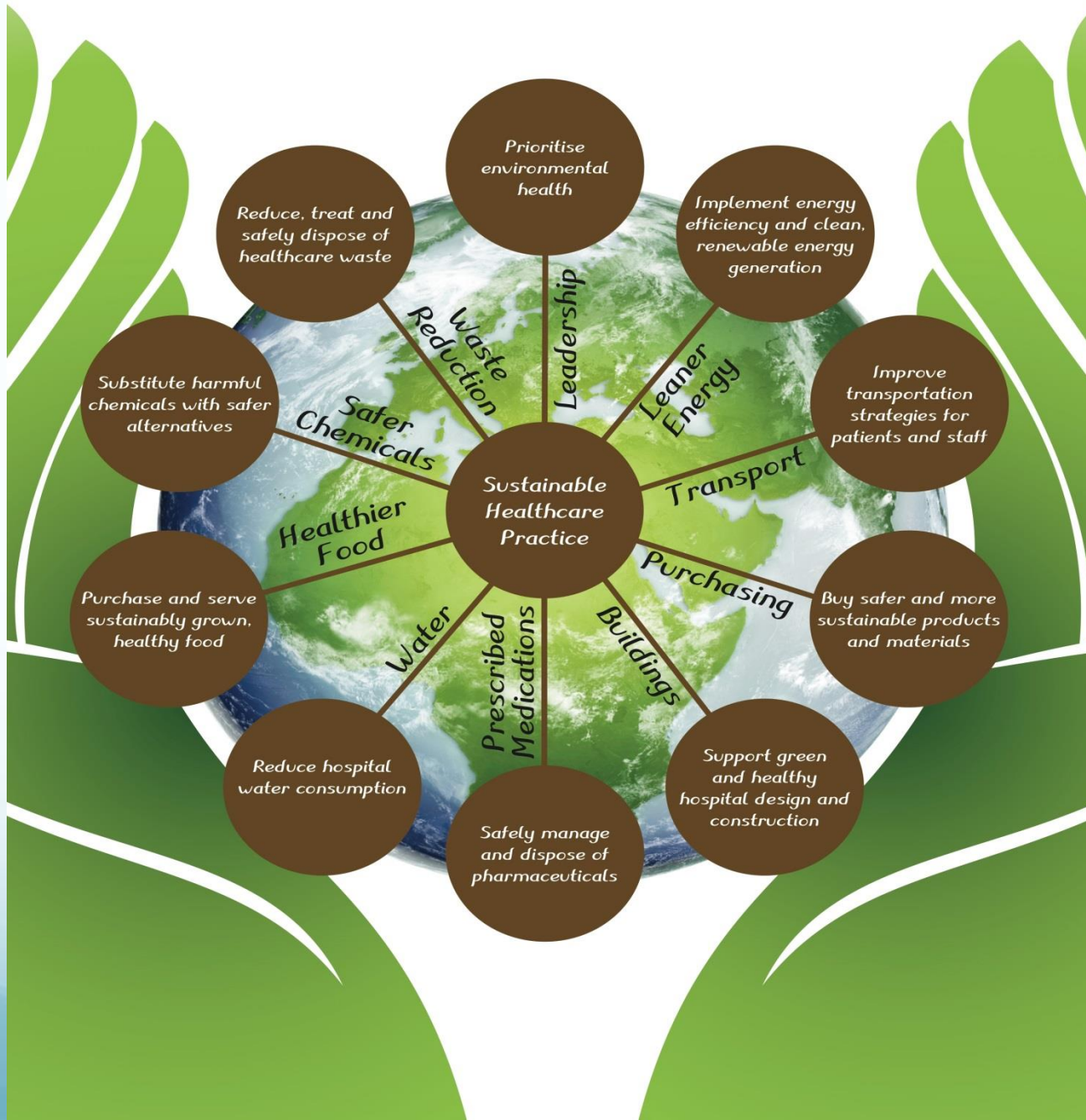


Evaluation

- Footprint reduction
- Reporting
- Spend
- Waste
- Mixed methods study
- Add to body of knowledge



Sustainable Healthcare Practice



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Reuse campaign-

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