

Decarbonising Healthcare

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Public Health
England

FHI
Folkehelseinstituttet

The bottom right section contains two logos. The top one is for Public Health England, featuring a cyclist in a green jersey and a yellow helmet with the number '153', next to the Royal Coat of Arms. Below this is the text 'Public Health England'. The bottom logo is for FHI (Folkehelseinstituttet), featuring a portrait of a woman with dark hair against a blue background with a white lion rampant, and the text 'FHI' and 'Folkehelseinstituttet'.



Climate Resilient
Green Economy (CRGE)



Source: Ethiopian Dam



BCEPS
University of Bergen
Staff

Staff members shown: Ole Frithjof Norheim, Peter Haggoma, Øystein Haaland, Alemayehu Hallu, Ingrid Milettag, Kjetil Arne Johannessen, Kristine Bærøe, Anand Bhagat, Carl Tollef Solberg, Maria Sollohub, Admassu Lamu, Eirik Trønvåg, Shoab Hassan, Elisabeth Høve, Jan-Magnus Økland, and Anne Hovde.



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Bergen Centre for Ethics and Priority Setting (BCEPS)

BCEPS aims to understand and promote ethically acceptable, fair, and efficient priority setting in national health systems.

About People Projects Publications Media News



The Evidence

THE LANCET
Volume 373 - Number 9676 - Pages 1659-1734 - May 16-22, 2009
www.thelancet.com

"Climate change is the biggest global health threat of the 21st century."
See The Lancet Commissions page 1693

Comment **Correspondence** **Articles** **Articles** **The Lancet Commissions**

Compensation for brain drain from developing countries
See page 1685

Amnesia from canned tuna?
See page 1672

RECORD-4: Rivaroxaban for thromboprophylaxis after total knee arthroplasty
See page 1673

TACT: sequential docetaxel as adjuvant chemotherapy for early breast cancer
See page 1675

Management of health effects of climate change
See page 1693

£5.00 Registered as a newspaper - ISSN 0140-6736
Founded 1823 - Published weekly

ipcc
INTERGOVERNMENTAL PANEL ON climate change

CLIMATE CHANGE 2014
Impacts, Adaptation, and Vulnerability
Part B: Regional Aspects

WG II

WORKING GROUP II CONTRIBUTION TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE


WHO UNEP

Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s

World Health Organization

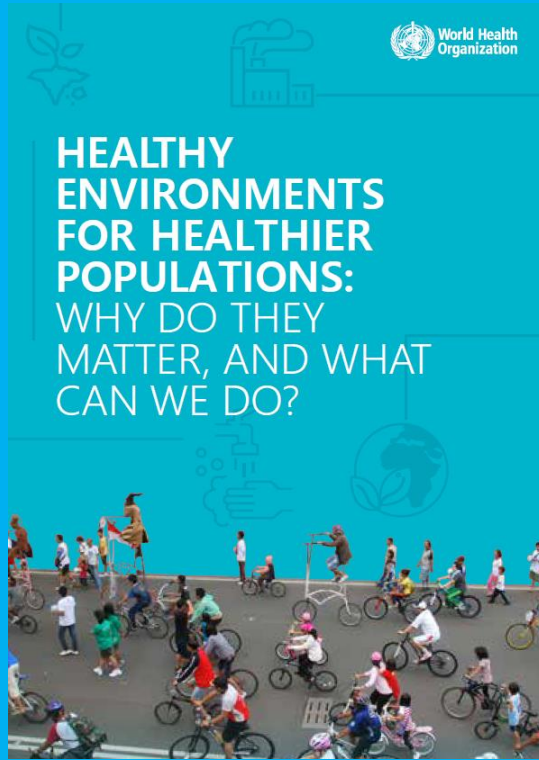
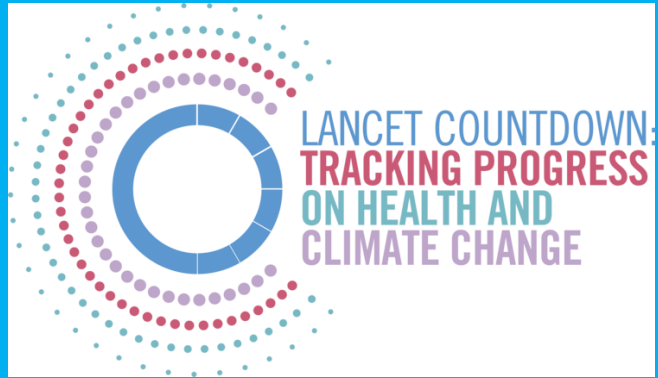
THE LANCET
June, 2015
www.thelancet.com

Health and climate change



"Tackling climate change could be the greatest global health opportunity of the 21st century."

A Commission by The Lancet

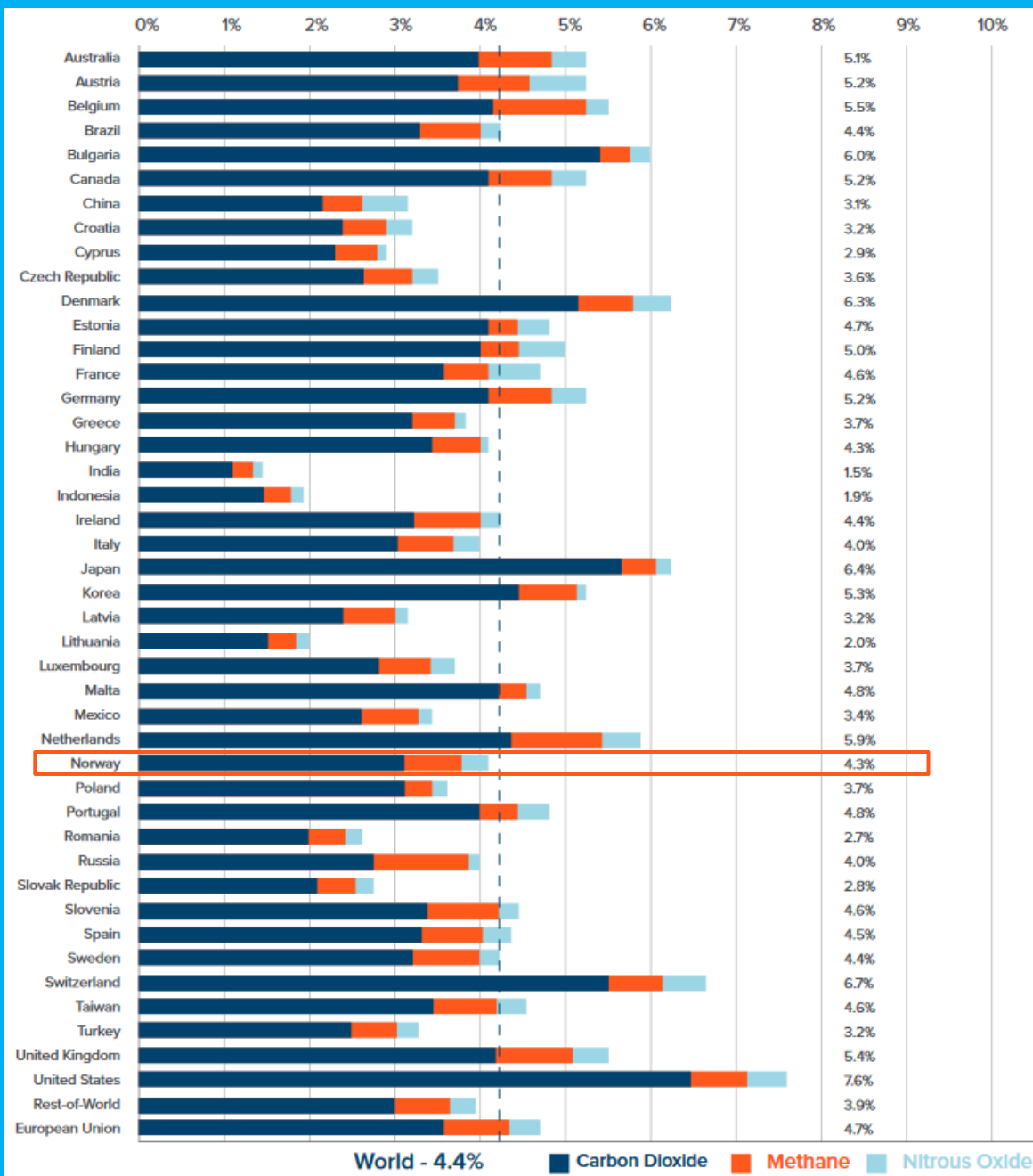


International climate & health agenda

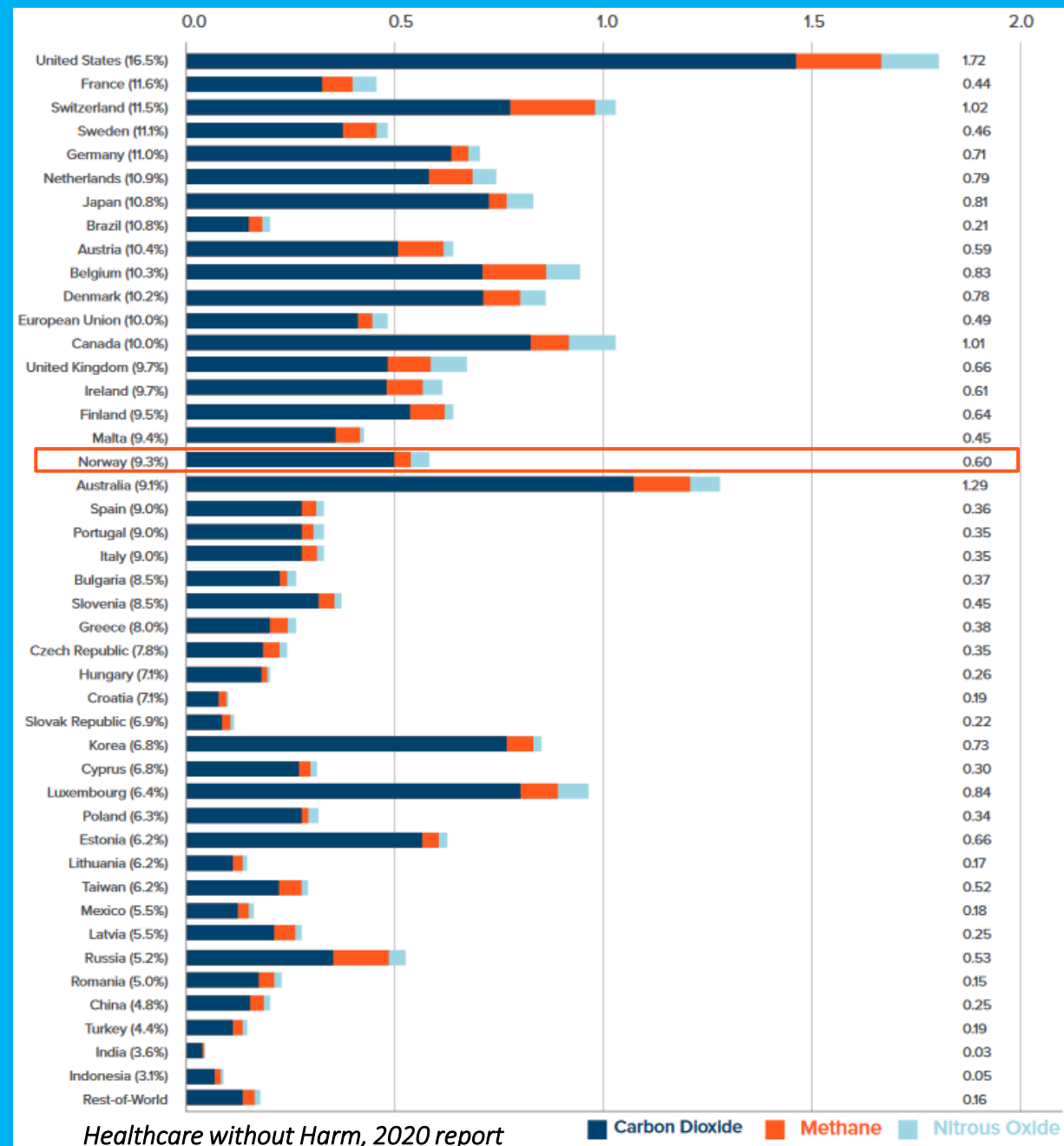
Healthcare emissions

and how to reduce them...

Healthcare footprint as % of national footprint

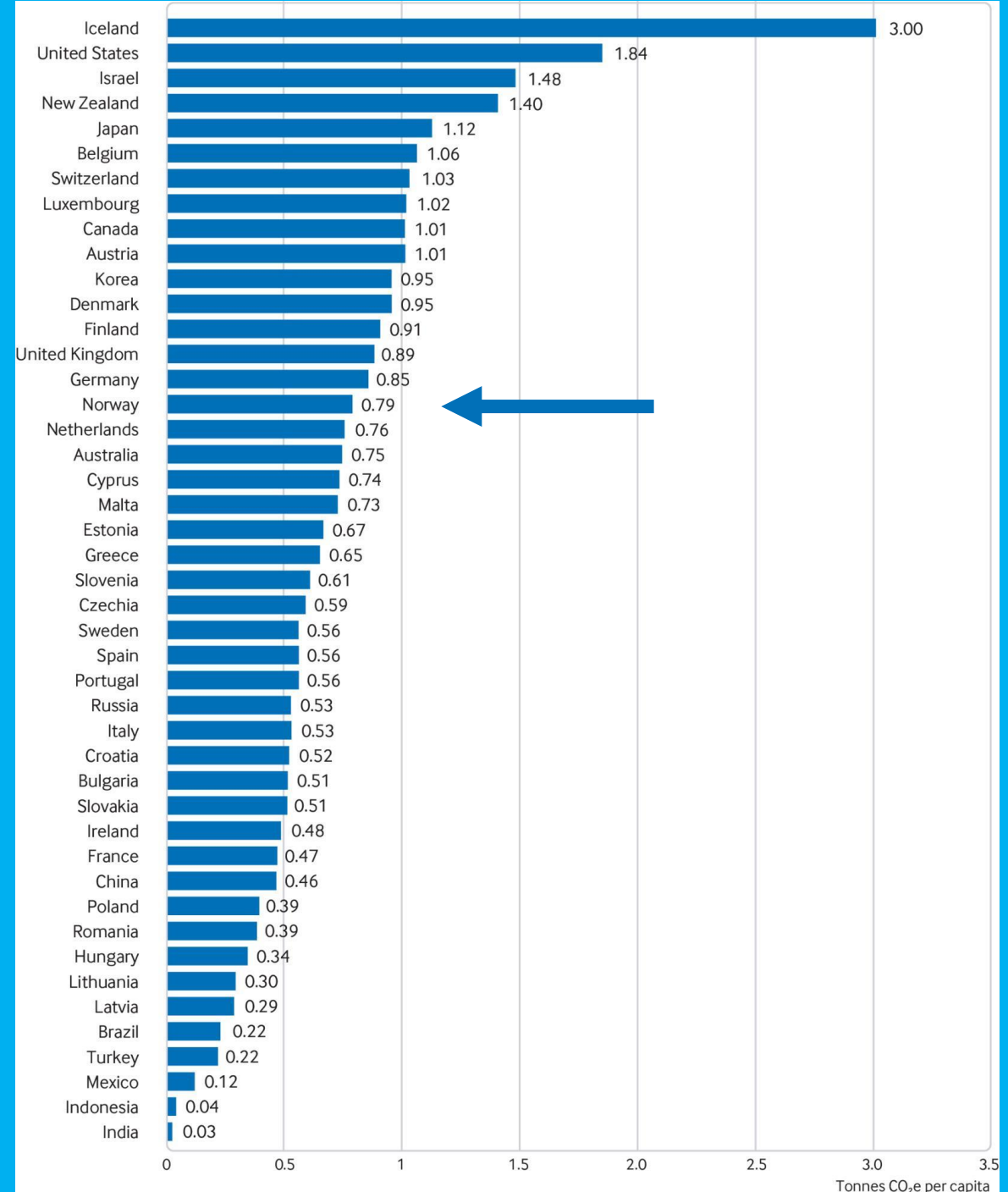
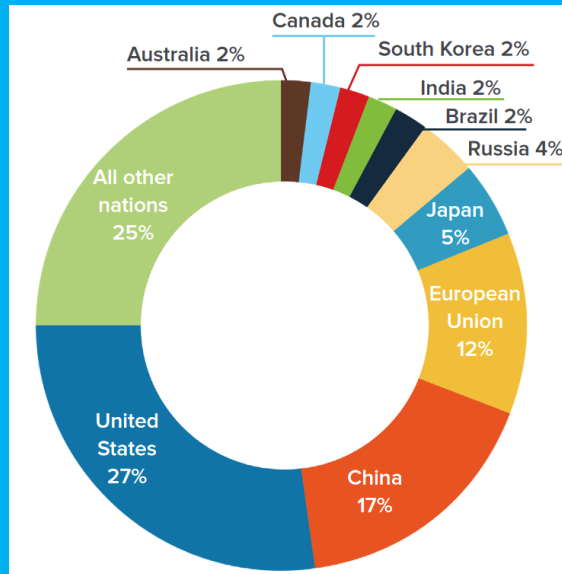


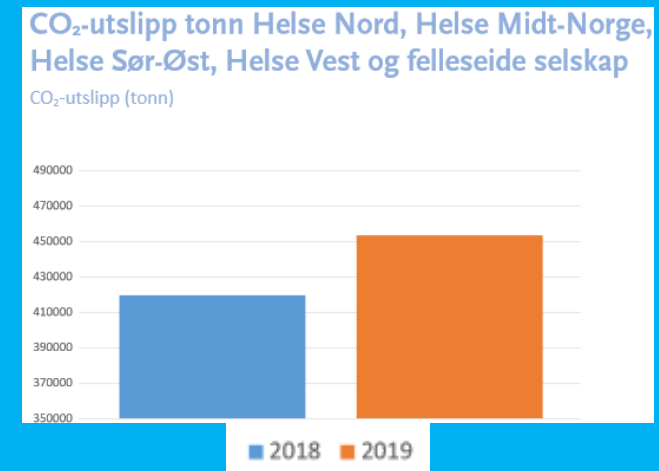
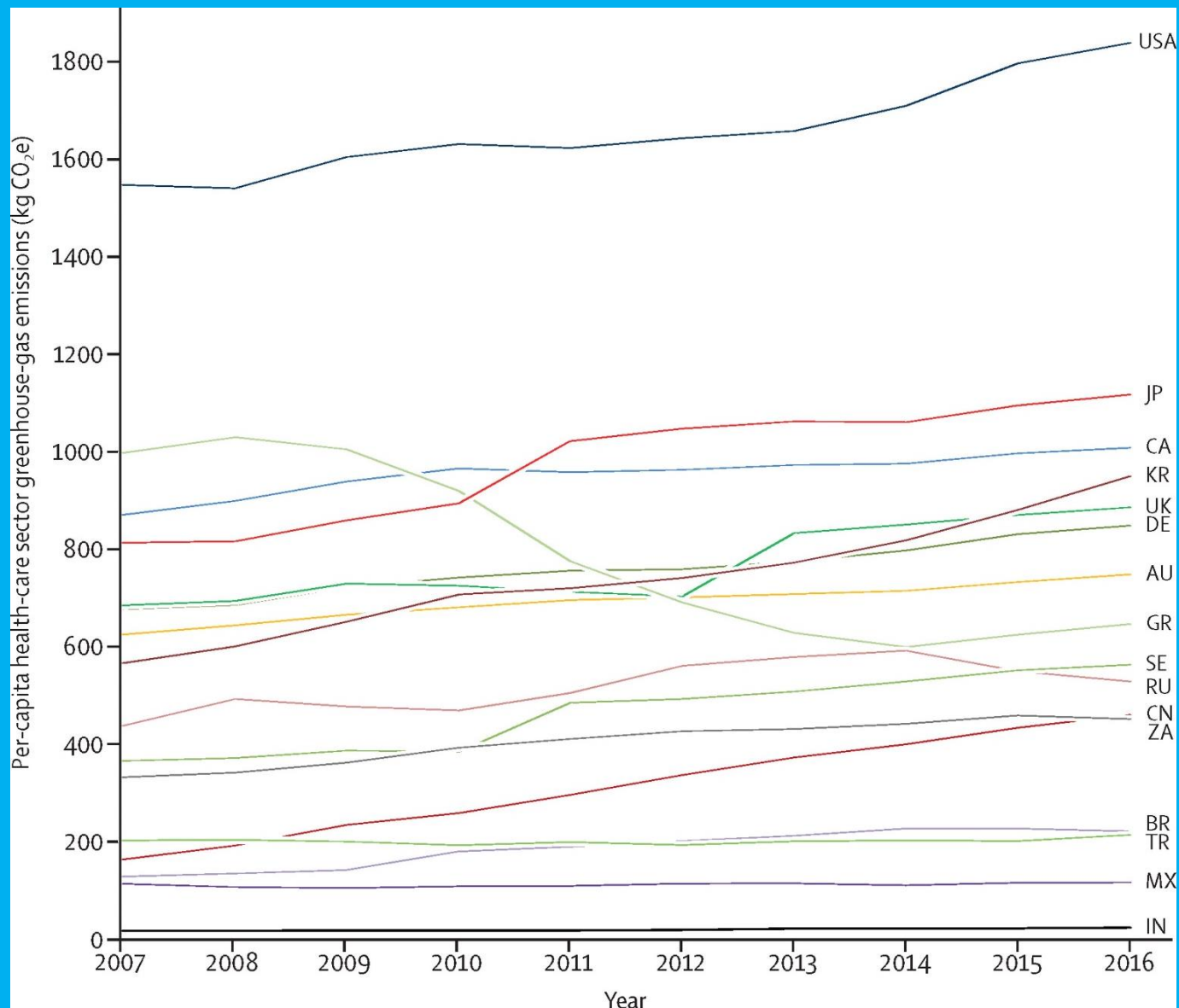
Healthcare footprint per capita (tCO₂e / capita)



Healthcare without Harm, 2020 report

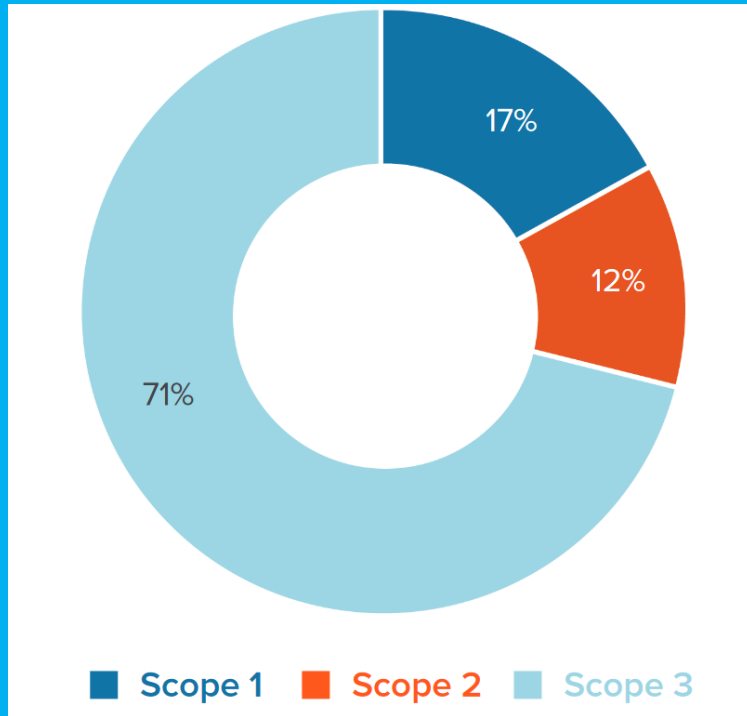
National healthcare carbon footprints.



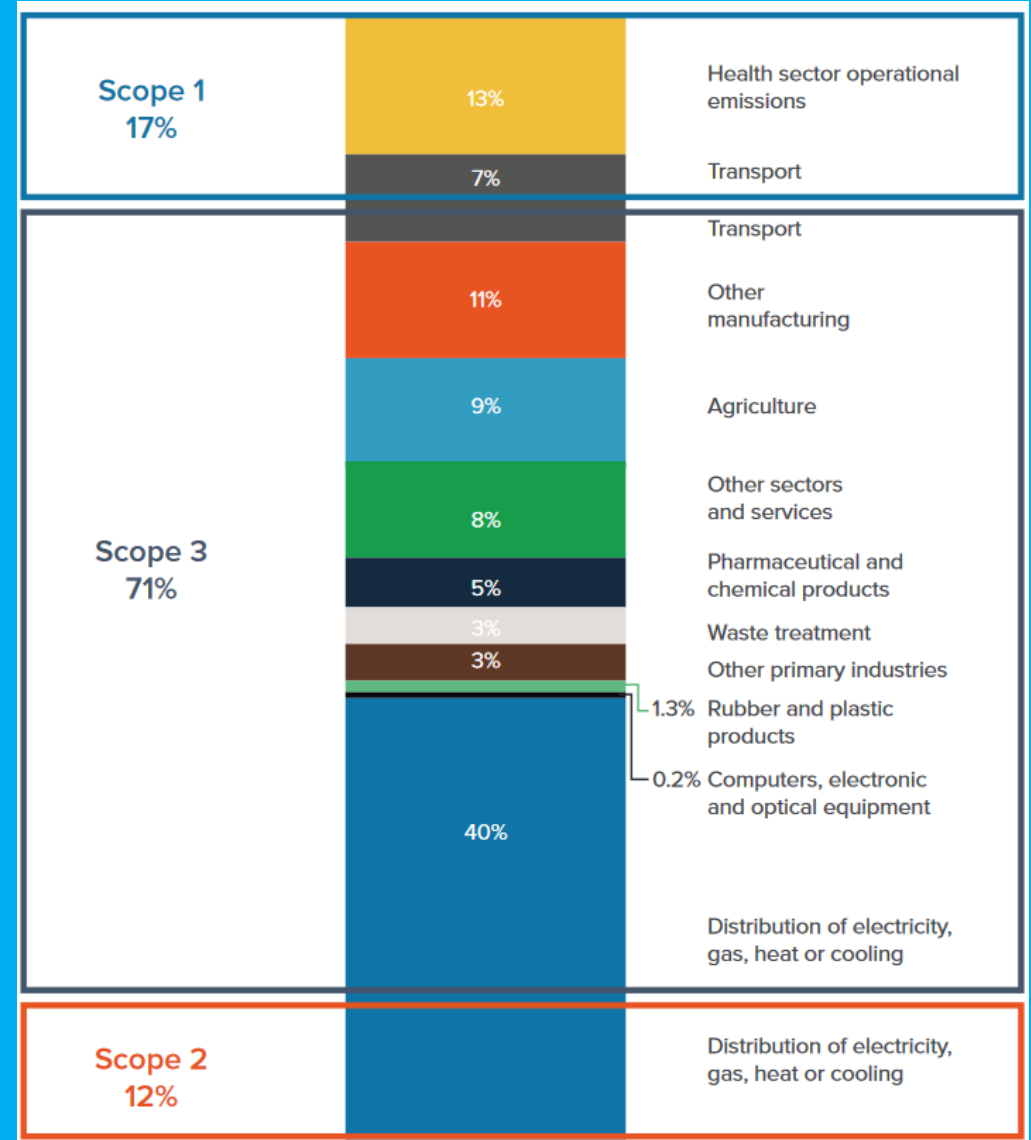


Healthcare
emissions
increasing

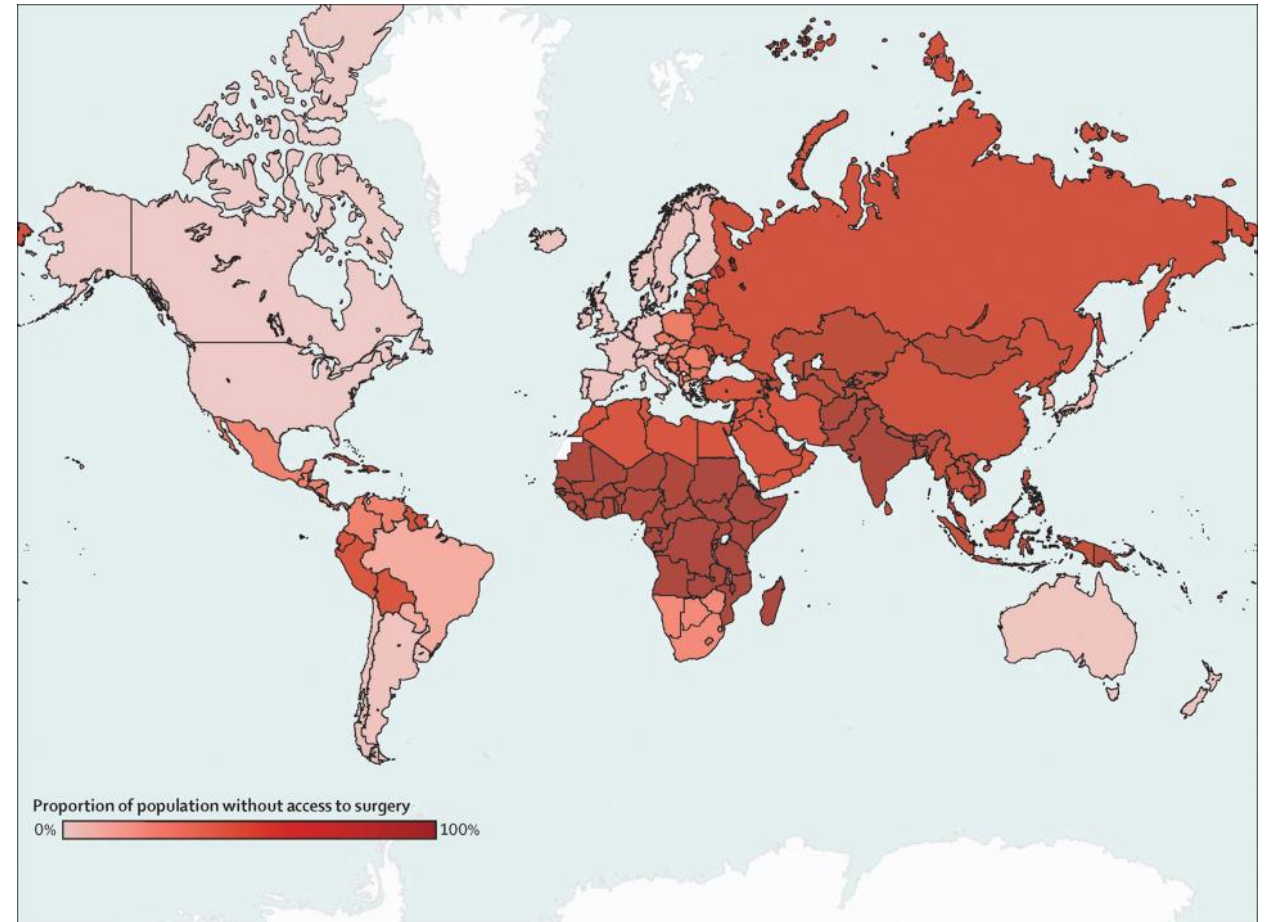
Emissions breakdown



Scope 1 – Direct
 Scope 2 – Indirect
 Scope 3 – Upstream



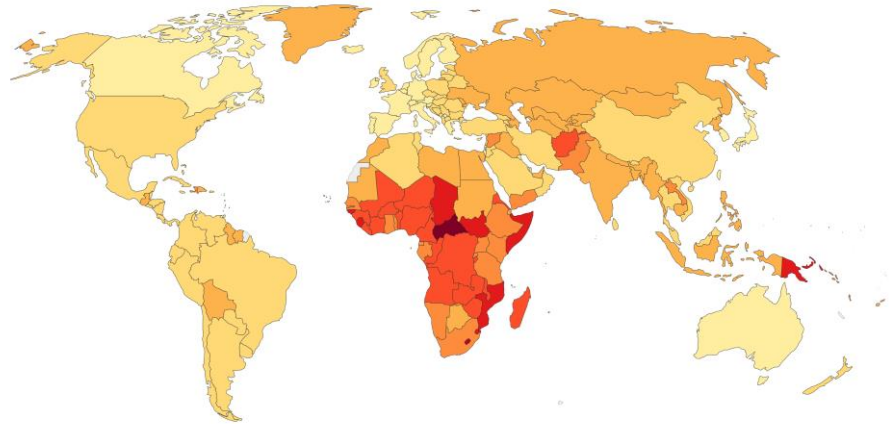
Emissions
should be
higher



Inverse care law

Burden of disease, 2017

Disability-Adjusted Life Years (DALYs) per 100,000 individuals from all causes. DALYs measure the total burden of disease – both from years of life lost due to premature death and years lived with a disability. One DALY equals one lost year of healthy life.



Source: IHME, Global Burden of Disease

Note: To allow comparisons between countries and over time this metric is age-standardized.

OurWorldInData.org/burden-of-disease • CC BY

Healthy life expectancy vs. Health expenditure per capita, 2014

Healthy life expectancy, defined as the average number of years lived free from disability or disease burden, versus average per capita health expenditure measured in 2011 international-\$.

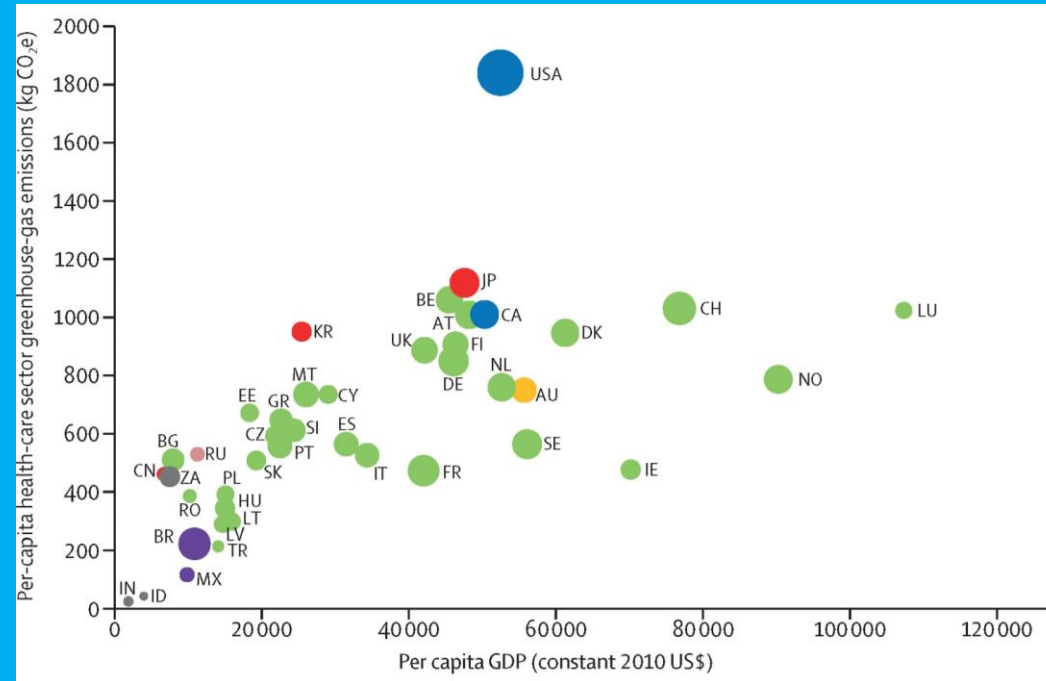
Our World
in Data



Source: IHME (2017), World Bank – WDI

CC BY

Healthcare emissions & GDP



- Carbon intensity of domestic energy
- Energy intensity of domestic economy
- National healthcare expenditure

} ~50% of the variation

Key takeaways

- Reductions inside & outside health sector
- Disease burden \neq healthcare emissions
- Scope 3 emissions ++



How can we achieve
net zero healthcare?

NHS

**Delivering a 'Net Zero'
National Health Service**



NHS England:
Net zero case study

MAJOR EMISSIONS

CH₄

N₂O

SF₆

CO₂

CFCs

PFCs

HFCs

SCOPE 1
DIRECT

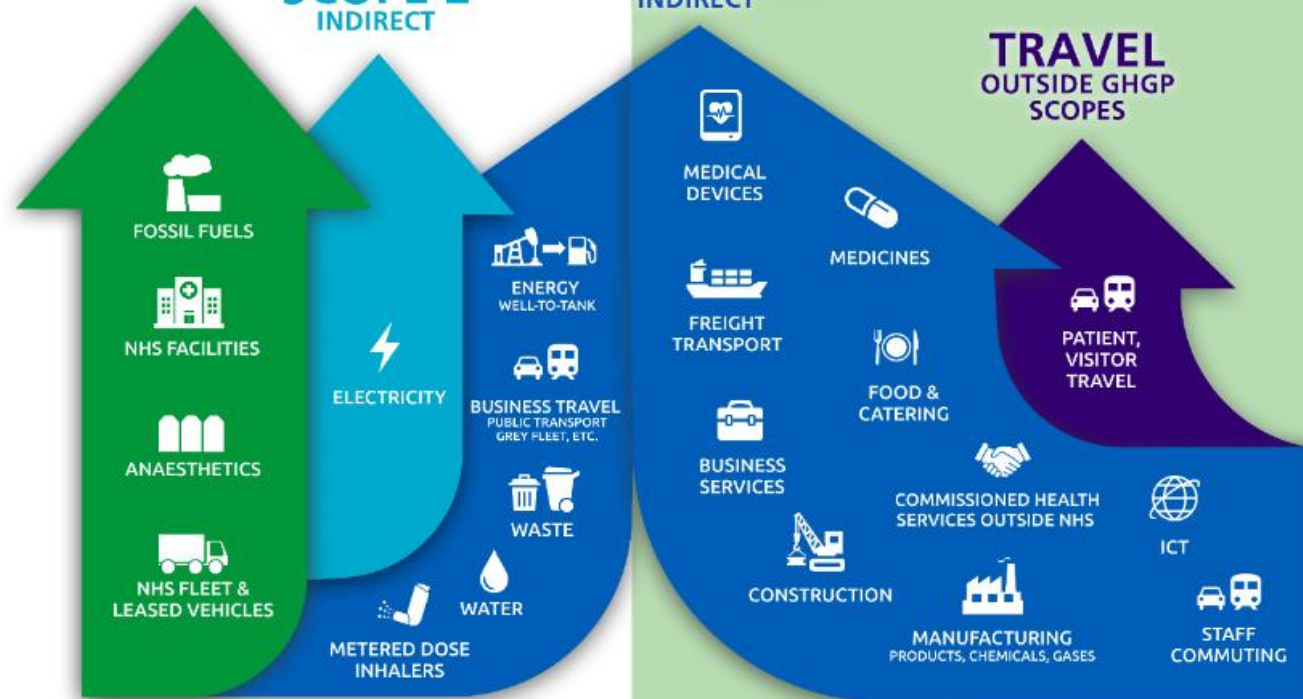
SCOPE 2
INDIRECT

SCOPE 3
INDIRECT

TRAVEL
OUTSIDE GHGP
SCOPES

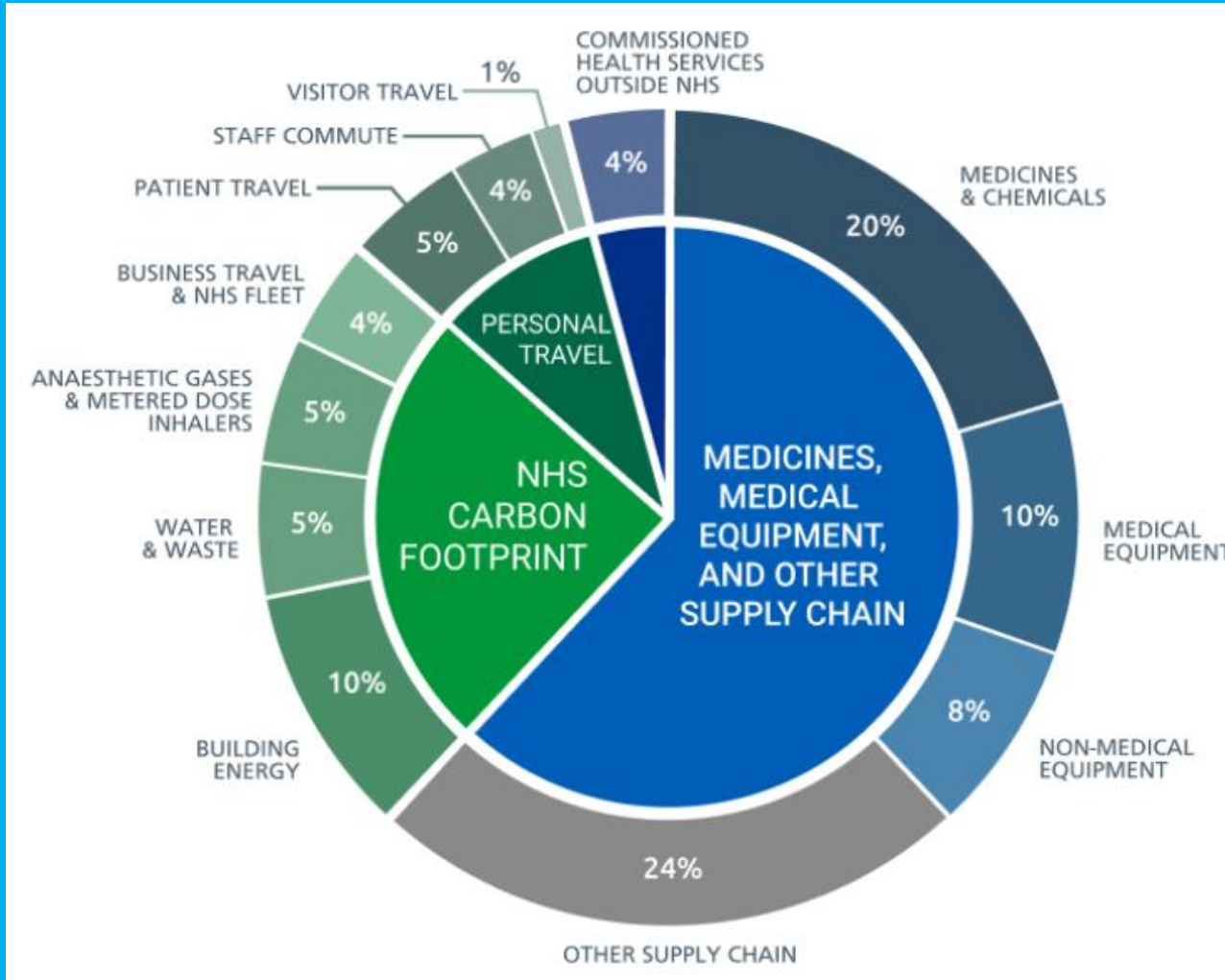
6.1 MtCO₂e
(Scope 1 & 2)

+ 18.9 MtCO₂e
(Scope 3)



Emissions by Source

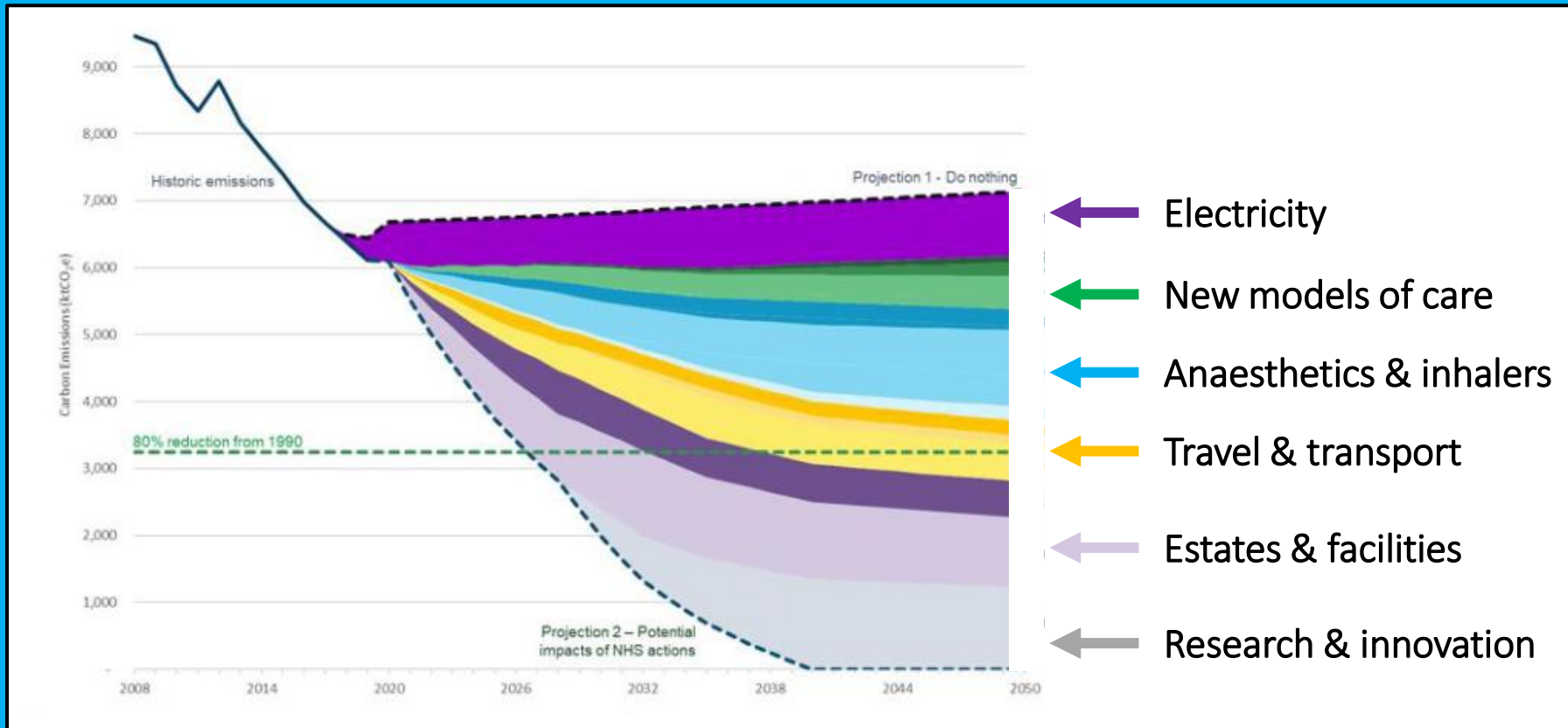
- Travel 9%
- Anaesthetics/inhalers 5%
- Energy 10%
- Other supply chain 24%
- Equipment 18%
- Medicines 20%



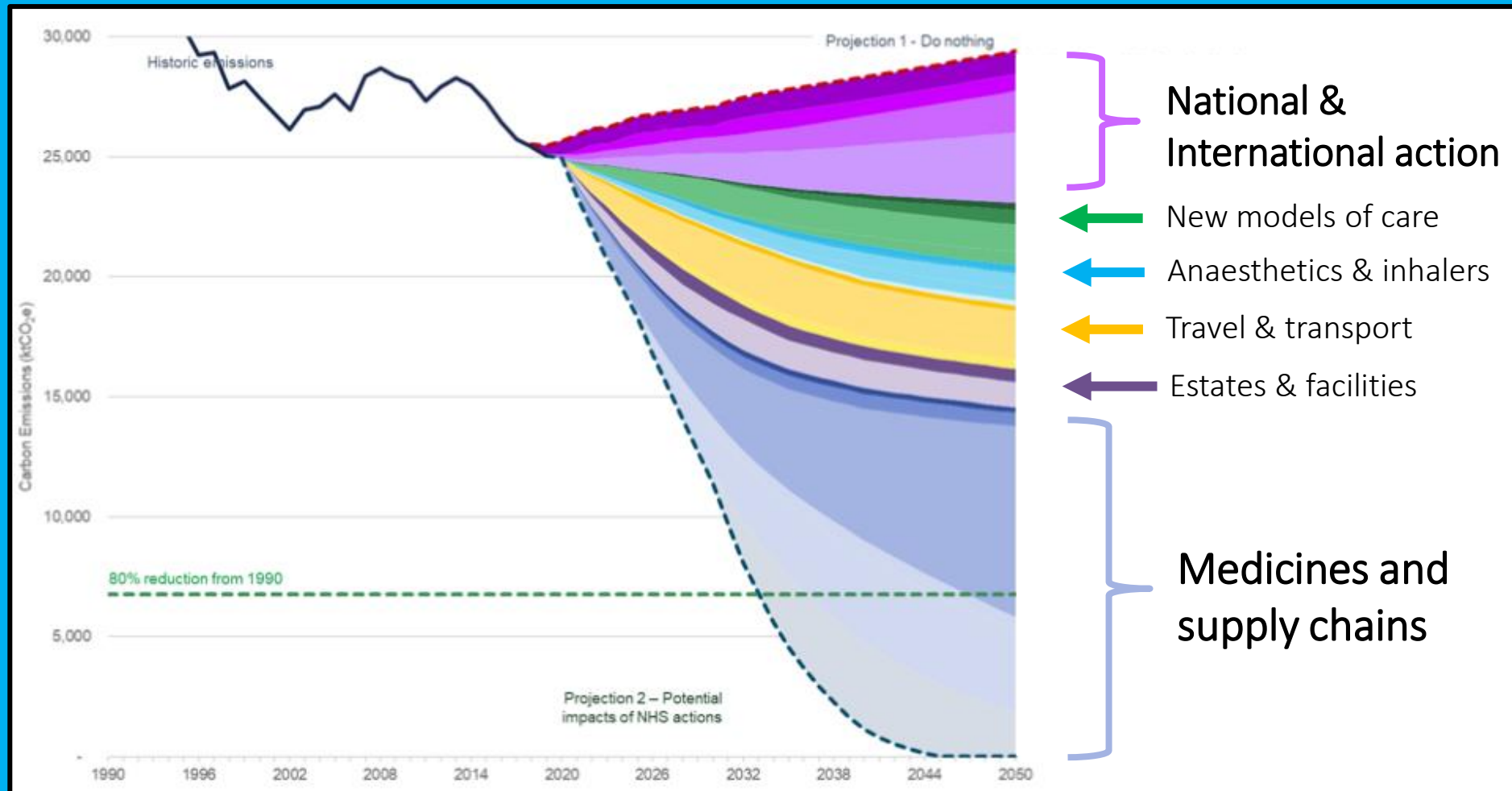
25.0 MtCO₂e
(Scope 1, 2 & 3)

NHS Carbon Footprint Pathway

(Scope 1 & 2)



NHS Carbon Footprint Plus Pathway (Scope 1-3)



Why healthcare? Why Norway?



Current activities



Helseskadelige helseutslipp

FRA REDAKTØREN

Are Brean Om forfatteren



Tidsskriftet
DEN NORSKE LEGEFØRENING

Det britiske National Health Service har vedtatt verdens første nasjonale plan for et klimanøytralt helsevesen. Hvem kan ta et lignende forpliktende initiativ i Norge?



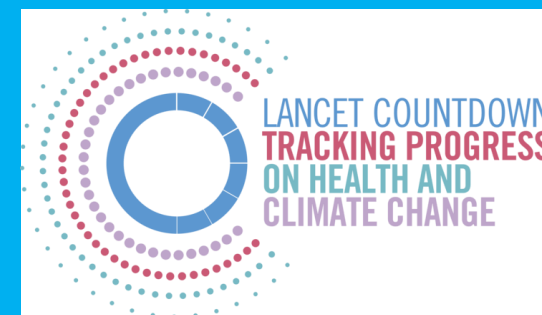
Menneskeskapte klimaendringer er vår tids største trussel mot folkehelsen (1). For å begrense global oppvarming og minske helsekonsekvensene haster det å nå målet om nullutslipp. Stadig flere samfunnsaktører tar konsekvensen av dette. Alt fra kommuner til klesprodusenter har i flere år siktet mot klimanøytralitet (2, 3), og selv den norske rederinæringen har nå som erklært mål å bli klimanøytral (4).



Joining the dots...

- Interdisciplinarity +++
- System transformations
- Prioritisation challenges
- Local, National and Global scale

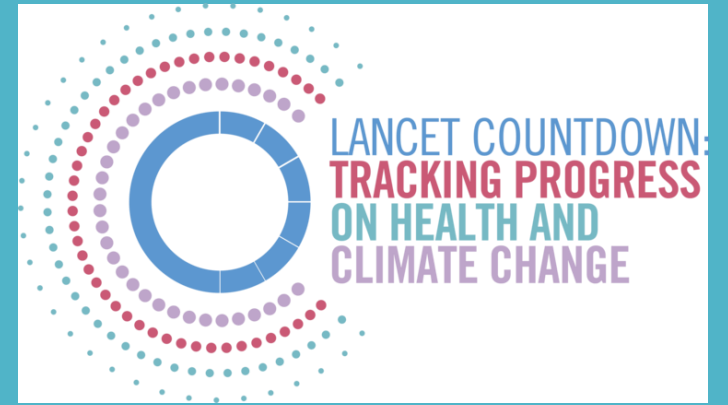
What can we do?





Lancet Countdown 2020 Launch

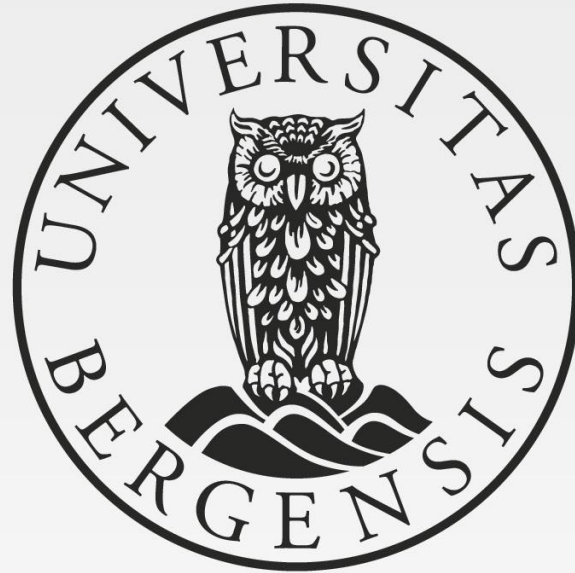
Oslo, 4th December 13.00
<https://nettskjema.no/a/171800#/page/1>





Resources

- **Healthcare Without Harm. Healthcare Global Footprint report, 2020:** https://noharm-global.org/sites/default/files/documents-files/5961/HealthCaresClimateFootprint_092319.pdf
- **Lancet Countdown on Health and Climate Change,** <https://www.lancetcountdown.org/>
- **Lancet Pathfinder Commission,** <https://www.lshtm.ac.uk/research/centres-projects-groups/pathfinder-initiative#welcome>
- **World Health Organisation manifesto for a green recovery,** <https://www.who.int/news-room/feature-stories/detail/who-manifesto-for-a-healthy-recovery-from-covid-19>
- **NHS England Net Zero plan,** <https://www.england.nhs.uk/greenernhs/>
- **2021 Global Conference on Health and Climate Change, COP 26 Glasgow:** <https://www.who.int/news-room/events/detail/2021/11/06/default-calendar/2021-global-conference-on-health-and-climate-change>



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