



Accelerating action for sustainable healthcare

Hospitals become leaders for sustainability in their communities



Addressing climate change as an integral part of healthcare delivery



Impacts of climate change on health

Weather

Extreme

Air Pollution & Increasing Allergens

Asthma, allergies, cardiovascular and respiratory diseases

Extreme Heat

Heat-related illness and death, cardiovascular failure

Drought

Water supply impacts, dust storms, Valley Fever

Environmental Degradation

Forced migration, civil conflict, loss of jobs and income

Wildfires & Wildfire Smoke

Injuries, fatalities, loss of homes, cardiovascular and respiratory diseases Mental Health Impact

Rising Temperatures

IMPACTS OF CLIMATE Stress, and deduction will conflict,

Rising Sea Levels

CDPH

CDP CHANGE

Increasing

GHG Levels

Water Quality Impacts

Harmful algal blooms, campylobacteriosis, cryptosporidiosis, leptospirosis

DPH (Adapted from CDC, J. Patz)

Degraded Living Conditions & Social Inequities

Exacerbation of racial and health inequities and vulnerabilities, loss of employment

Changes In Vector Ecology

Lyme disease, West Nile Virus, hantavirus, malaria, encephalitis

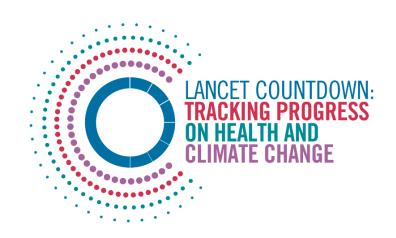
Food System Impacts

Malnutrition, food insecurity, higher food prices, foodborne illness

Severe Weather & Floods

Injuries, fatalities, loss of homes, indoor fungi and mold

Healthcare's climate footprint represents 4 - 6% of global net emissions



The 2023 Report of the Lancet Countdown: The imperative for a health-centred response in a world facing irreversible harms

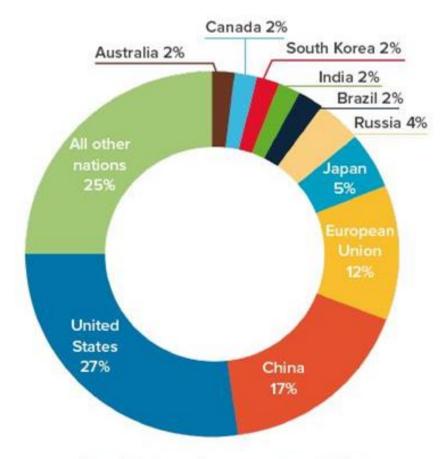


Figure 8: Top ten emitters as percentage of global health care footprint.

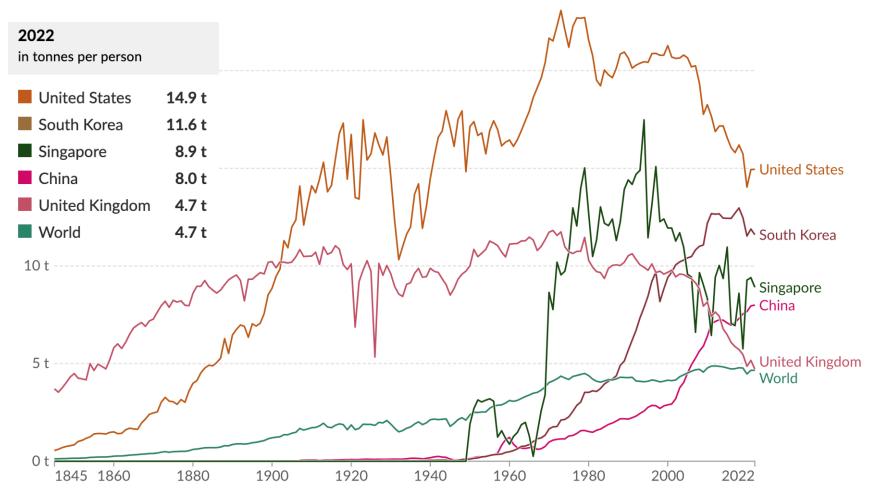


Singapore on the global stage

Per capita CO₂ emissions



Carbon dioxide (CO₂) emissions from fossil fuels and industry¹. Land-use change is not included.



Data source: Global Carbon Budget (2023); Population based on various sources (2023) OurWorldInData.org/co2-and-greenhouse-gas-emissions | CC BY

^{1.} Fossil emissions: Fossil emissions measure the quantity of carbon dioxide (CO_2) emitted from the burning of fossil fuels, and directly from industrial processes such as cement and steel production. Fossil CO_2 includes emissions from coal, oil, gas, flaring, cement, steel, and other industrial processes. Fossil emissions do not include land use change, deforestation, soils, or vegetation.





Singapore - second globally in healthcare per capita emissions

<u> Singapore Medical Journa</u>

Singapore's healthcare

Urban hotspot of human exposure to high temperatures

– potentially see 5°C increase by 2100

<u>Singapore Medical Journal</u>





Healthcare spending as a percentage of GDP = 8.8%

<u> Singapore – Health sector emissions</u>

Why does it matter to healthcare leaders in Singapore?



- Singapore is expected to experience an economic loss of around \$2.22 billion per annum due to the impact of climate related events
- This is an opportunity for healthcare leadership in Singapore to build capacity and resilience within their organizations
- Healthcare leaders uniquely positioned, as they have a voice that matters and is trusted within the community. What you say and do matters

Low-carbon, resilient, and equitable healthcare

Enhancing quality of care whilst reducing the environmental footprint.





Building resilience to the impacts of climate change and other adverse events.

Understanding and addressing the determinants of health and vulnerabilities of the communities we serve.



Geneva Sustainability Centre | Powered by the IHF



Collaborative engagement to improve community health outcomes and wellbeing.

Transforming operational and clinical practices towards low-carbon care and prevention.



Developing committed leadership that is accountable to staff, patients, and communities.

Value of

Patient experience, clinical effectiveness, patient safety



Outcomes for patients and populations

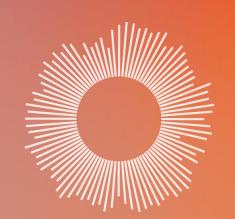
Environmental + social + financial impacts (the 'triple bottom line')



Use of resources, emissions, equity & fairness, finances







Getting the culture right



Policies

Sustainability becomes a core value to the organizational strategy



Decisions

Lead by example through actions and accountability



People

Engage and educate your workforce



Processes

Track, report and celebrate the wins



Institutional commitment

Since the 2000s environmental responsibility is integrated into institutional programs





2012

100% Renewable Energy



2019

Creation of the eco-responsible medicine group

Gigawatt Electricity Trophy



2021

Creation of the Sustainability Committee

Carbon footprint yearly report



2009

First eco-performance Evaluation



First CSR report

Sustainability commitment: CSR objectives into institutional strategic plan (2015-2020)



2020

Creation of the Sustainability Office

Sustainability evaluation



2022

Participative approach

Sustainability Strategy elaboration and launch

IHF CSR Award 2022



2023-2025

Sustainability action plan implementation



2018Cantonal Award for

Sustainable Development

Greener Care Initiative









Climate and health

Equality, diversity and inclusion

Sustainable consumption and production

- Quantify the environmental impact of care units and medical
 & nursing practices
- Integrate the environmental dimension into medical and nursing practices
- Adopt more sustainable management of medication
- Reduce the use of single-use medical equipment

CLIMATE AND HEALTH

THE 2030 TARGETS

- Establish and implement a climate action plan
- ▶ Reduce energy consumption
- Produce and increase the use of renewable energy
- Promote sustainable building construction and renovation
- Reduce the effects of heatwaves and promote biodiversity
- ▶ Increase the use of sustainable mobility for commuting

- ▶ Reduce the environmental impact of business travel
- Quantify the environmental impact of care units and medical and nursing practices
- Integrate the environmental dimension into medical and nursing practices
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NHS Sustainability journey







Saving Carbon, Improving Health









NHS CARBON REDUCTION STRATEGY FOR ENGLAND

2008 – Climate Change Act – UK

2009 – First carbon footprint

and carbon reduction strategy

2009 - Marginal Abatement Cost

Curve

2015 – Sustainable Development

Strategy

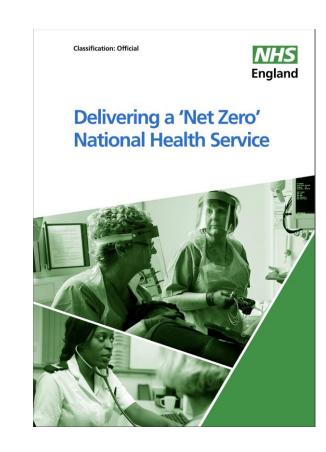
2019 - Greener NHS

2020 - Net Zero plan

2022 – Net Zero embedded in

Legislation

2024 – NIHR and MRC grants

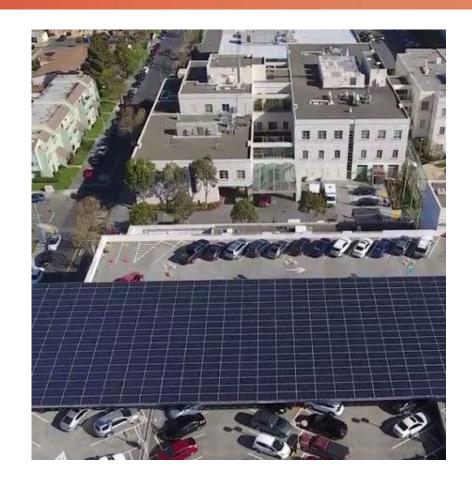




Wide-spread culture shift across the entire system: *Kaiser Permanente, United States*

Savings by integrating sustainability as a core value:

- Partnership with the state of California to pilot green microgrids – saved 263 tons of CO₂ annually and \$394K/year
- Energy efficiency investments saved \$20 million/year
- \$3 million/year from water saving investments
- Delivers over \$63 million in purchasing and operational cost savings



Return on Investment



- Reprocessing medical devices at Advocate Health (US) is saving \$3.5 million yearly
- Providence (US) over \$11 million annually through their sustainability efforts and hope to be saving \$100 million annually through its sustainability programme.
- In France, opting for day-case surgery saves €3,921 per laparoscopic intervention
- Switching from single-use to reusable anaesthetic equipment saved
 £19,220/year in a hospital in Australia

Sustainability as a Leadership Competency



Sustainability is a leadership competency. All hospital executives should have the leadership and the agency to generate positive change.

Leadership commitment towards sustainability leads to:

- 1. Organizational success
- 2. Broader societal well-being

To implement net zero healthcare, hospital leaders must work across all domains of the IHF's Leadership Framework.



Supporting leaders to accelerate action in their hospitals and to become leaders for sustainability in their communities





Information and capacity building

- Executive learning programme
- Carbon EmissionsLearning Lab (CELL)
- Sustainability guides and case studies



Raising the standard and accelerating action globally

- Accreditation standards copublished with JCI
- Licensing option for other accrediting organizations
- Certification programme in development



Strategic planning and progress

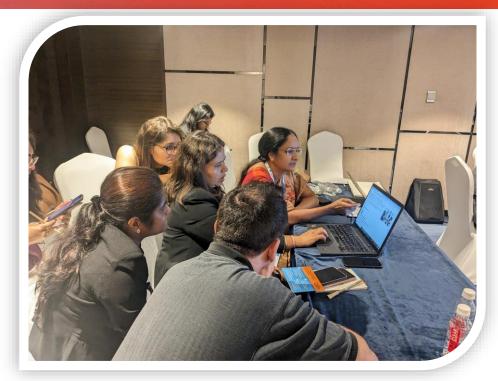
- Sustainability Accelerator Tool (SAT)
- Aligned with ESG
 reporting and hospital
 accreditation
- Consultancy support

Carbon Emissions Learning Lab (CELL)



- Simulation-based learning tool
- Sustainability-orientated decisionmaking





- Using real-world data
- Empowering healthcare leaders of today and tomorrow

Deloitte.

How can SAT benefit your hospital?



- Effective and strategic decision-making supported by in-depth, comprehensive sustainability maturity insights.
- Report and benchmark across hospital performance worldwide, providing sector intelligence.

Build sustainability capacity for executives and staff through learning resources - turning action into impact.

Live webinars and free trial demos available

Accreditation Standards for Environmental Sustainability



Accreditation standards for environmental sustainability co-developed with the <u>Joint Commission International</u> (JCI) in 2023.

- The standards to be published in July 2024 form a new "Global Health Impact" chapter in JCI's 8th edition of Accreditation Standards for Hospitals.
- These standards will be made available to other accrediting organization globally through a licensing process.
- A certification programme for hospitals willing to demonstrate additional efforts towards net zero healthcare is in development and available early 2025.

Role of government and regulatory bodies



Set the Framework:

- ➤ To encourage a culture of sustainability
- >To accelerate action and innovation
- >To agree standards and monitoring processes
- ➤ To incentivise progress

To consider regulatory and legislative mechanisms to support a rapid and smooth transition

Being a part of the solution

"To the health community, I urge you to take on the responsibility as climate champions"

Dr Tedros Adhanom Ghebreyesus, Director General - WHO, Dec 2023.



Call to Action!



Lead by example



Foster a culture of sustainability



Secure a sustainable Singapore

Be the change maker





Thank you!