
# Caribbean Climate and Health Responders Course

## Health sector mitigation and adaptation - June 1st, 2022

Antonella Risso / Andrea Hurtado Epstein
Health Care Without Harm

EarthMedic EarthNurse
Promoting Health of People and Planet Together

COLUMBIA
MAILMAN SCHOOL OF PUBLIC HEALTH
GLOBAL CONSORTIUM ON CLIMATE AND HEALTH EDUCATION

Caribbean Institute for Meteorology and Hydrology
CIMH

# Learning Objectives

A. Apply the concepts of mitigation and adaptation to the healthcare sector and explore examples of how healthcare systems can perform both.
B. Identify ways in which health care facilities can become more resilient in the face of increasingly severe and/or frequent climate-related weather extremes. Sensitization to the PAHO SMART Hospital program.
C. Use emergency planning skills to plan for and respond to climate-related extreme weather events and disasters, including workforce surge needs, and distinguish the roles of and interactions between agencies involved in emergency care.
D. Describe how health professionals can partner with health care institutions, professional organizations, and advocacy groups to reduce health care sector greenhouse gas footprint.

# What is Health Care Without Harm?


Health Care Without Harm (HCWH) is an international nongovernmental organization (NGO) that works to transform health care worldwide so that it reduces its environmental footprint, becomes a community anchor for sustainability, and a leader in the global movement for environmental health and justice.

# The Global Green and Healthy Hospitals (GGHH) Network

Health Care Without Harm

GGHH has 1,556 members in 75 countries representing the interests of 62,016 hospitals and health centers

GLOBAL GREEN and HEALTHY HOSPITALS

### US and Canada
12 members representing the interests of 2,384 hospitals and health centers.

### Europe
117 members representing the interests of 5,741 hospitals and health centers.

### Asia
242 members representing the interests of 19,730 hospitals and health centers.


### Global
10 members representing the interests of 1,315 hospitals and health centers.

### Latin America
946 members representing the interests of 25,339 hospitals and health centers.

### Africa
107 members representing the interests of 5,472 hospitals and health centers.

### Pacific
122 members representing the interests of 2,035 hospitals and health centers.

# The climate crisis is a health crisis
# The Lancet Countdown on health and climate change

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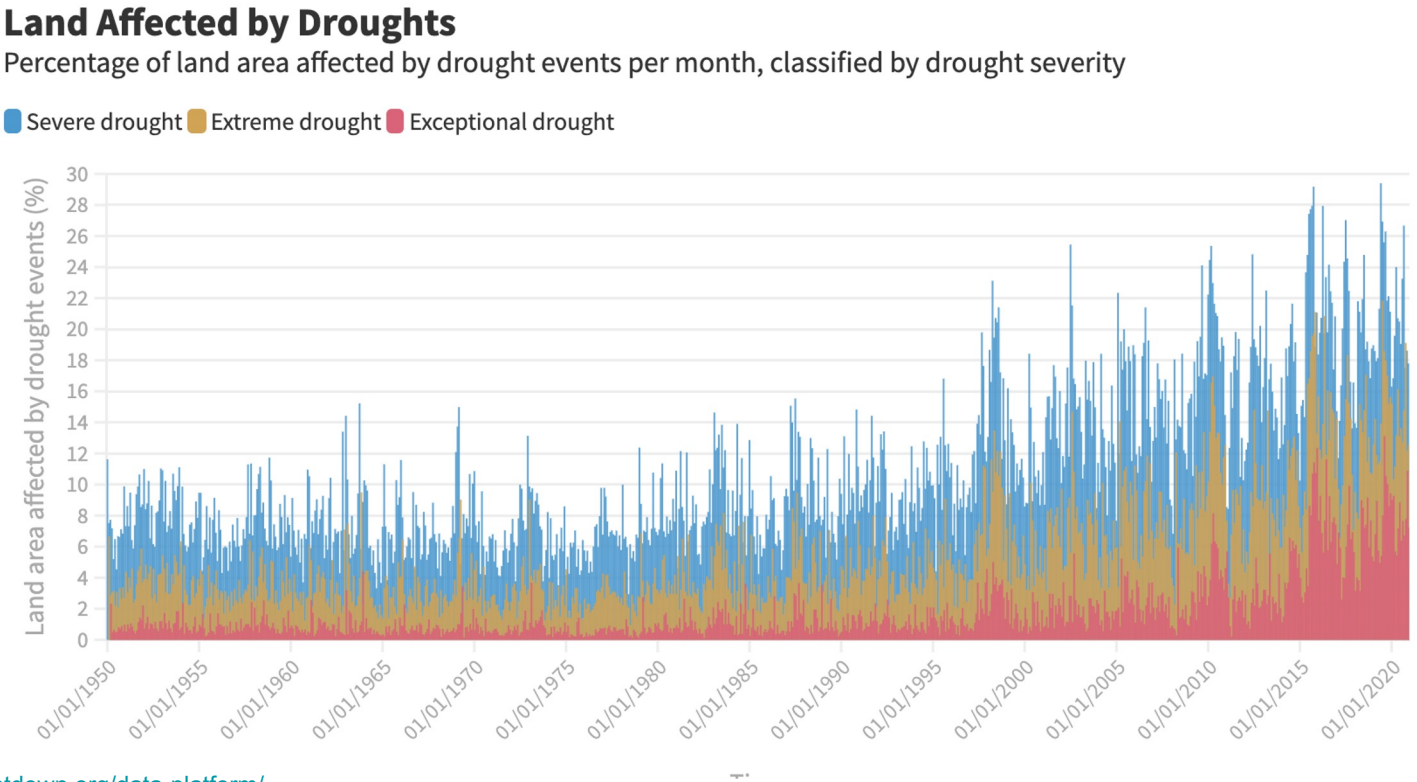


https://www.lancetcountdown.org/data-platform/

# The climate crisis is a health crisis
# The Lancet Countdown on health and climate change

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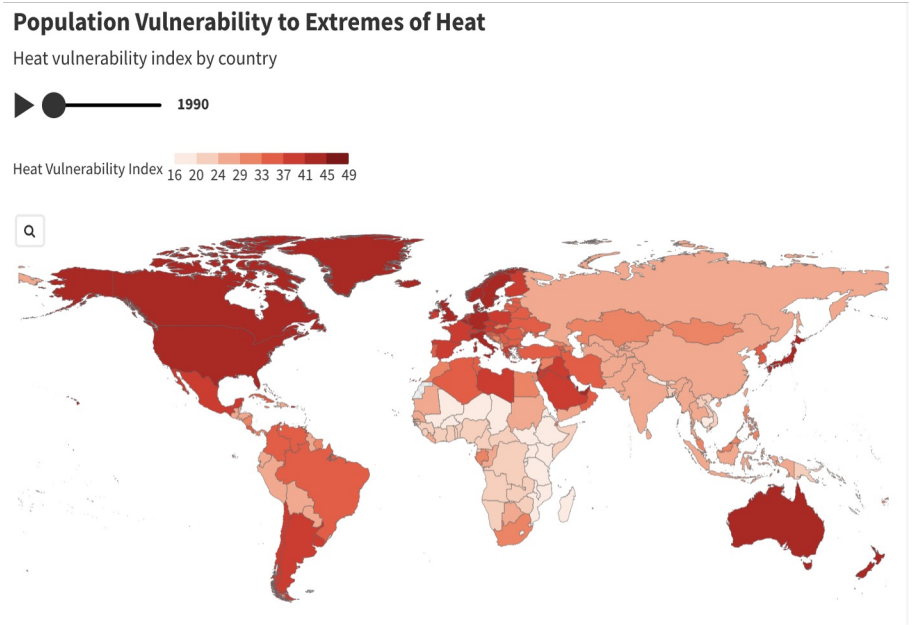
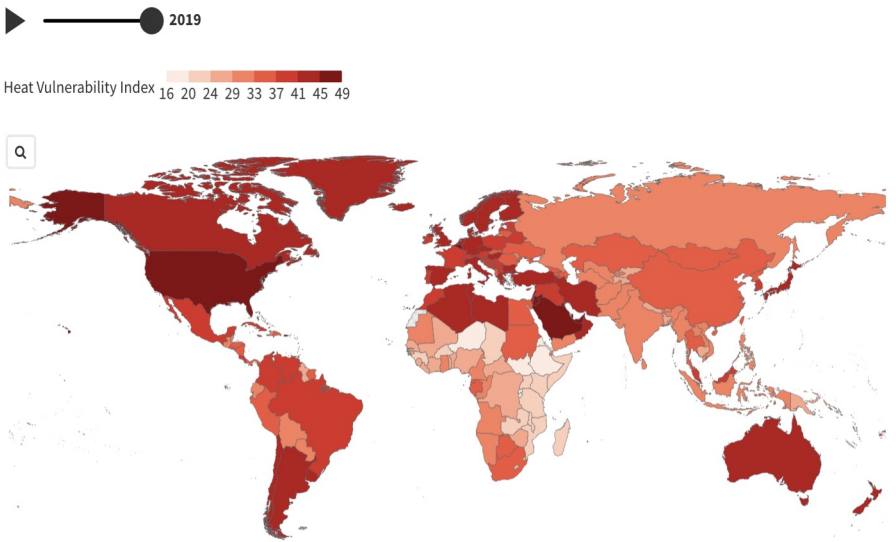
## Vulnerability to extremes of heat




https://www.lancetcountdown.org/data-platform/

# IPCC Group 2. Sixth Assessment report

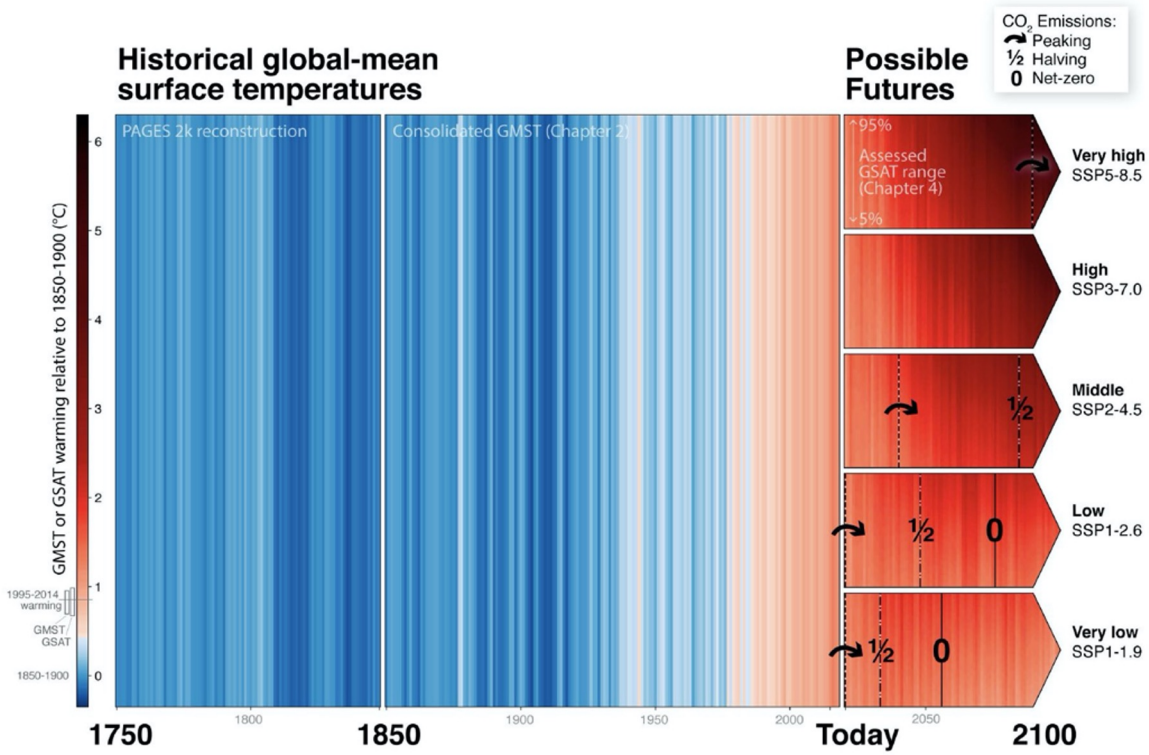
## Chapter 7: Health, Wellbeing, and the Changing Structure of Communities

Health Care Without Harm

- Climate-related illnesses, premature deaths, malnutrition in all its forms, and threats to mental health and wellbeing are increasing (very high confidence). Climate hazards are a growing driver of involuntary migration and displacement (high confidence) and are a contributing factor to violent conflict (high confidence)
- With proactive, timely, and effective adaptation, many risks for human health and wellbeing could be reduced and some potentially avoided
- Climate resilient development has a strong potential to generate substantial co-benefits for health and wellbeing, and to reduce risks of involuntary displacement and conflict
- Key transformations are needed to facilitate climate resilient development pathways for health, wellbeing, migration and conflict avoidance.
- Targeted investments in health and other systems, including multi-sectoral, integrated approaches, to protect against key health risks can effectively increase resilience
- Transitioning toward equitable, low-carbon societies has multiple benefits for health and wellbeing

https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_FinalDraft_Chapter07.pdf

# IPCC Group 1. Sixth Assessment report




https://www.ipcc.ch/report/ar6/wg1/

- 2018 report: 1.5°C as the threshold for a liveable planet
- **AR6: we can still keep 1.5°C alive, but we need to peak emissions by 2025, cut them in half by 2030 and reach net-zero by 2050**
- Every single fraction of a degree matters

# Why do we need to mitigate in the health sector?

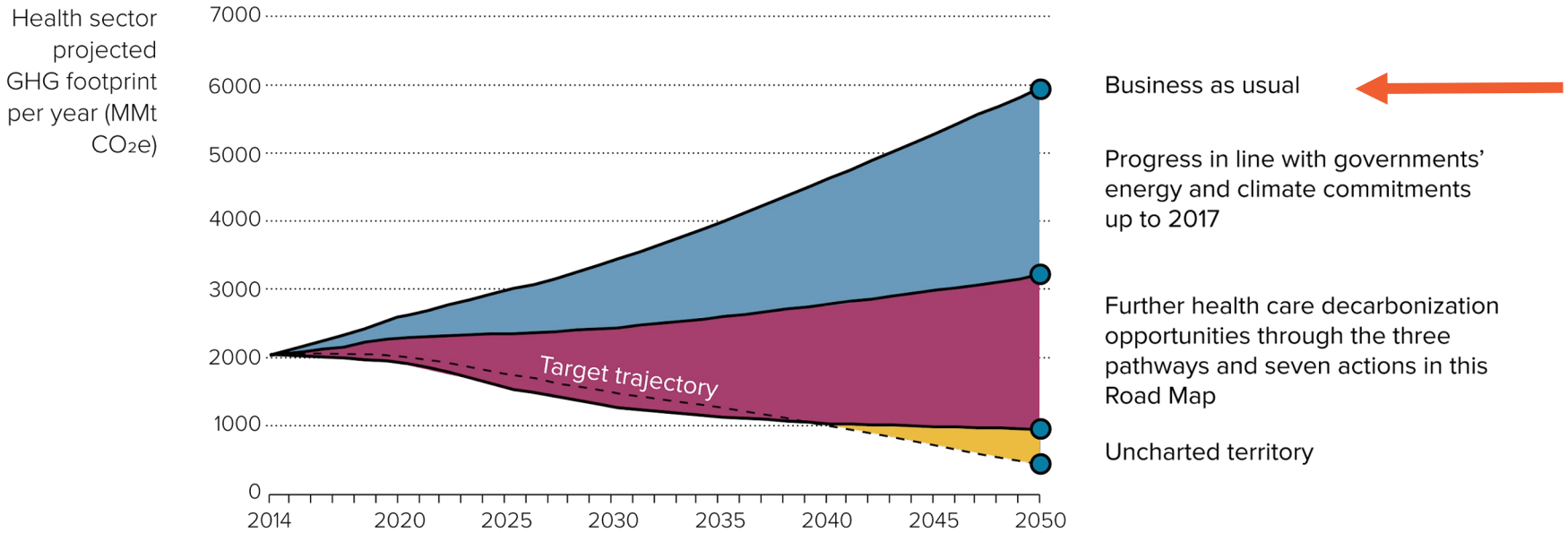



**Figure i.** Health Care Without Harm and Arup Global Road Map for health care decarbonization.

https://healthcareclimateaction.org/roadmap

# Possible pathways to zero emissions

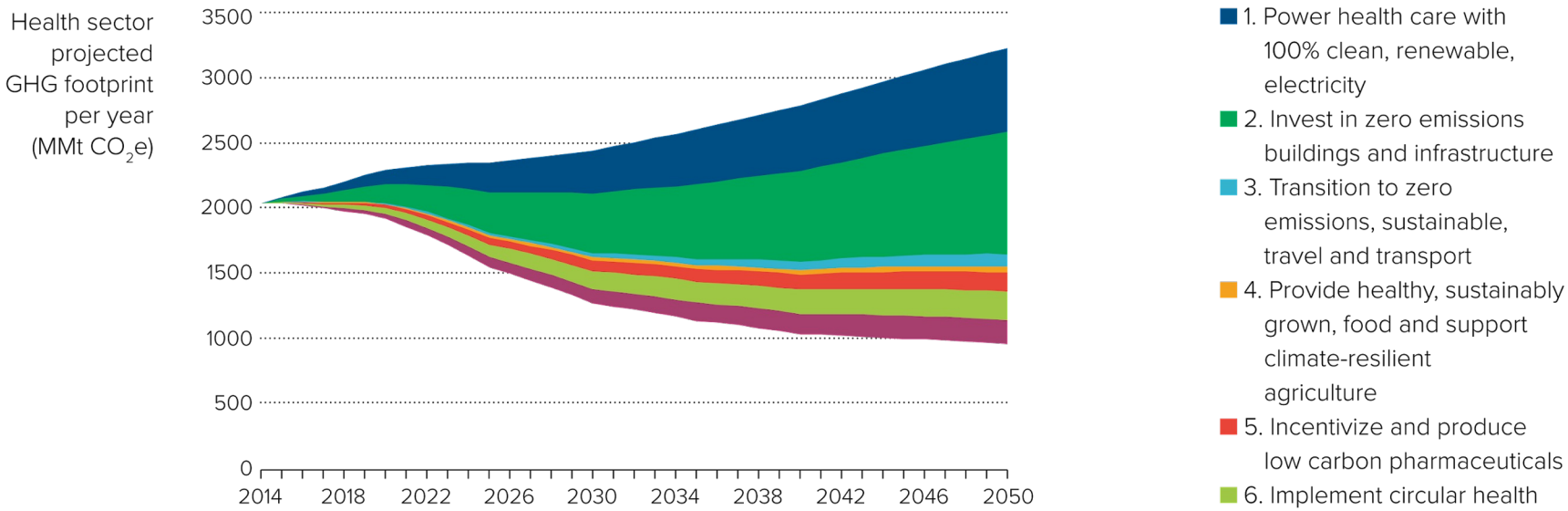



**Figure ii.** Reduction in health sector emissions between 2014 and 2050 enabled by the seven high-impact actions. This details a segmentation of the purple wedge shown in Figure i. above.

https://healthcareclimateaction.org/roadmap

# Common but differentiated responsibilities

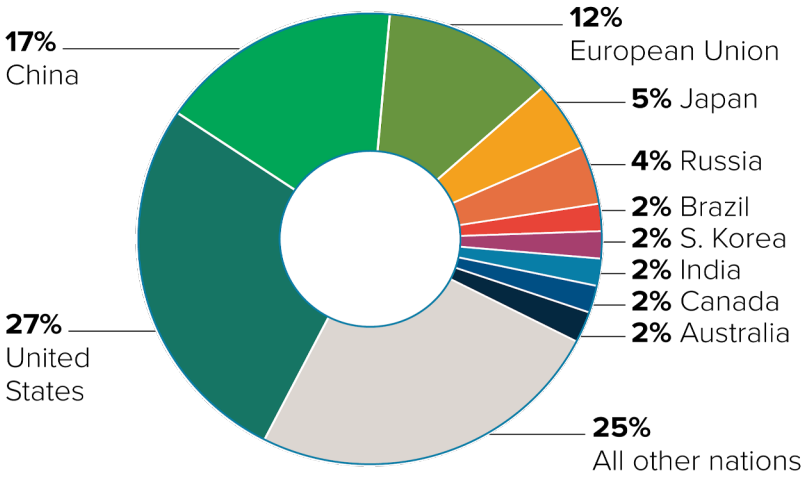



**Figure 5.** Top ten emitters plus all other nations and percentage of global health care footprint.

Source: Green Paper One.

https://healthcareclimateaction.org/roadmap

- The United States health sector, the world's number one emitter in both absolute and per capita terms produces 57 times more emissions per person than India's health system does.
- Other top health sector emitters, like Australia, Canada, and Switzerland emit between 30 and 50 times more per capita than India does.

# Common but differentiated responsibilities

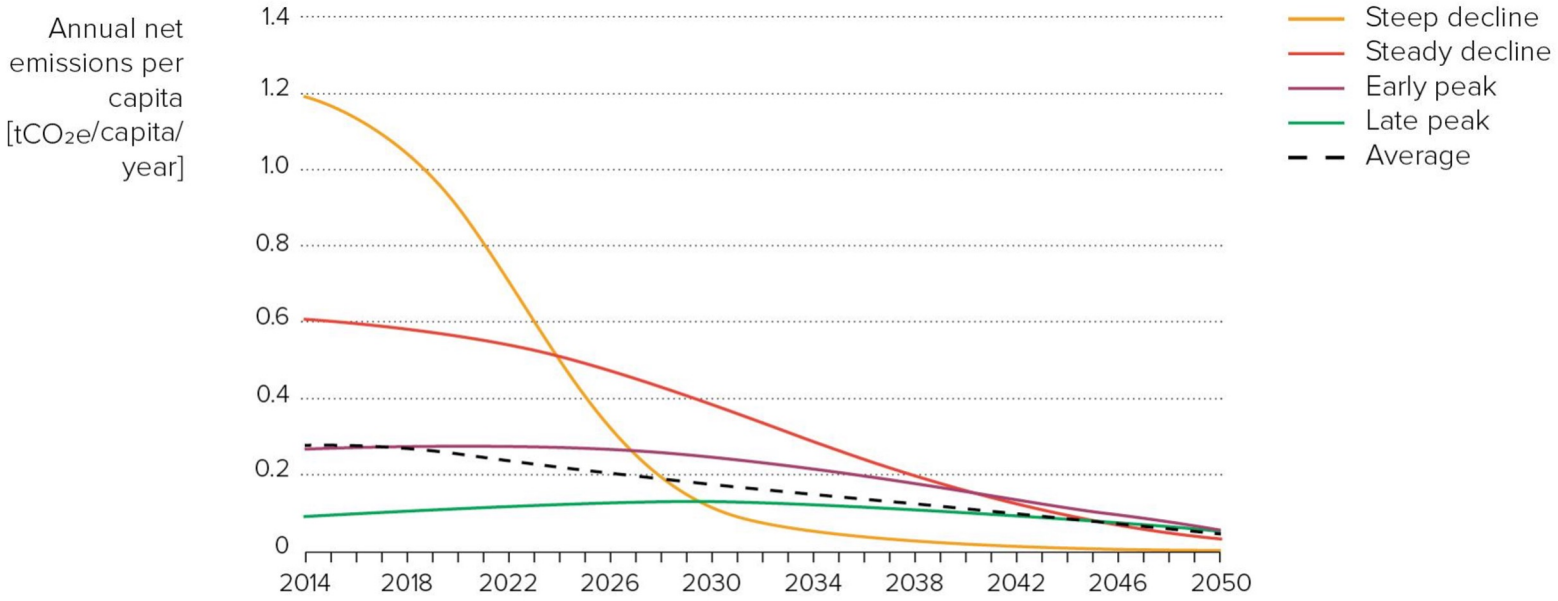



**Figure 15.** Four Decarbonization Trajectories – annual per capita emissions.

https://healthcareclimateaction.org/roadmap

# Zoom Poll Question 1

- Out of the high impact actions that the health sector can take to reach zero emissions by 2050, which are the three in which you could have the most influence from your current position?
  1. Powering healthcare with 100% clean, renewable electricity
  2. Investing in zero emissions buildings and infrastructure
  3. Transitioning to zero emissions, sustainable travel and transport
  4. Providing healthy and sustainably grown food
  5. Incentivizing and producing low-carbon pharmaceuticals
  6. Implementing circular healthcare and sustainable health care waste management
  7. Establishing greater health system effectiveness

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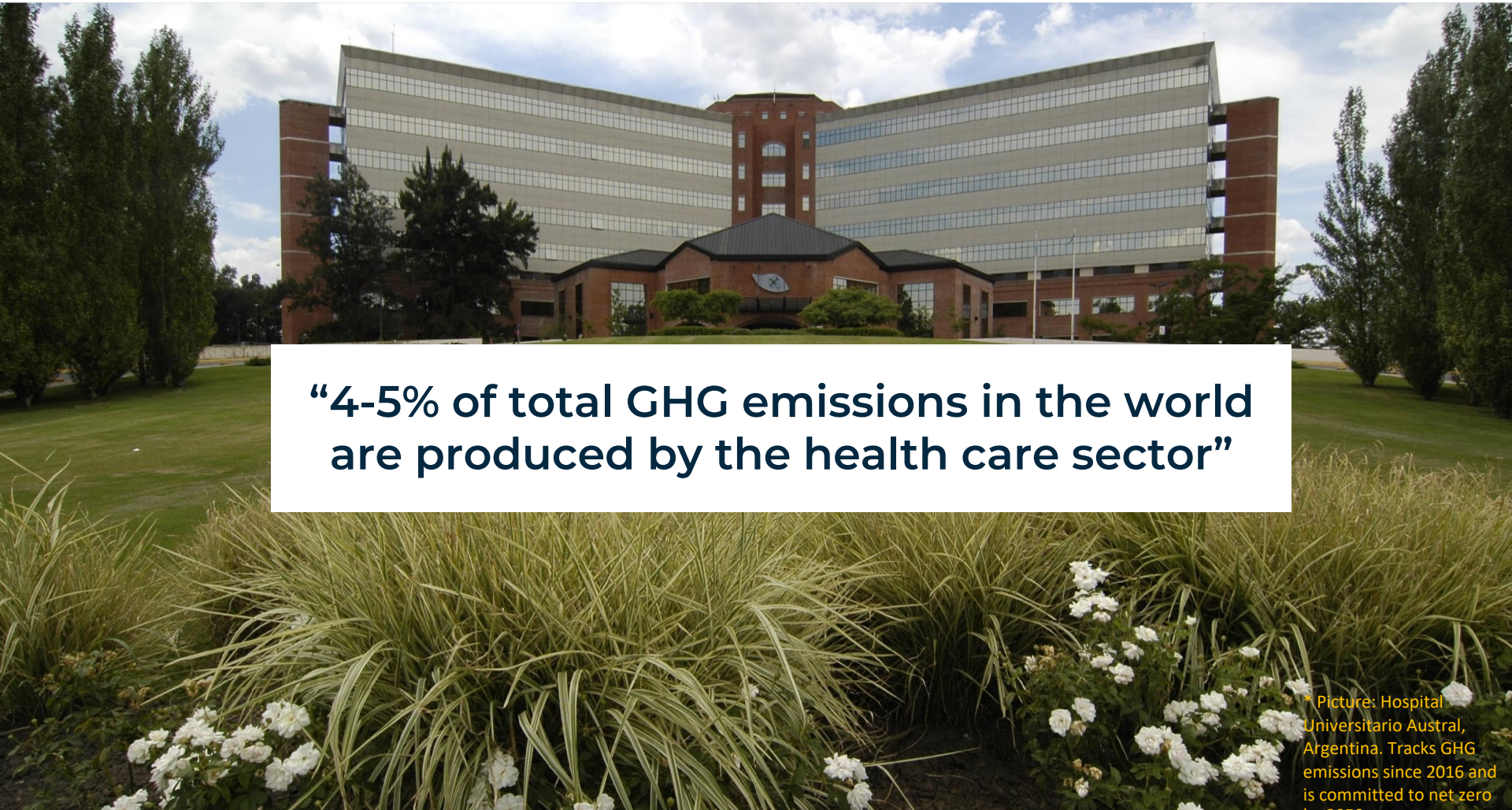


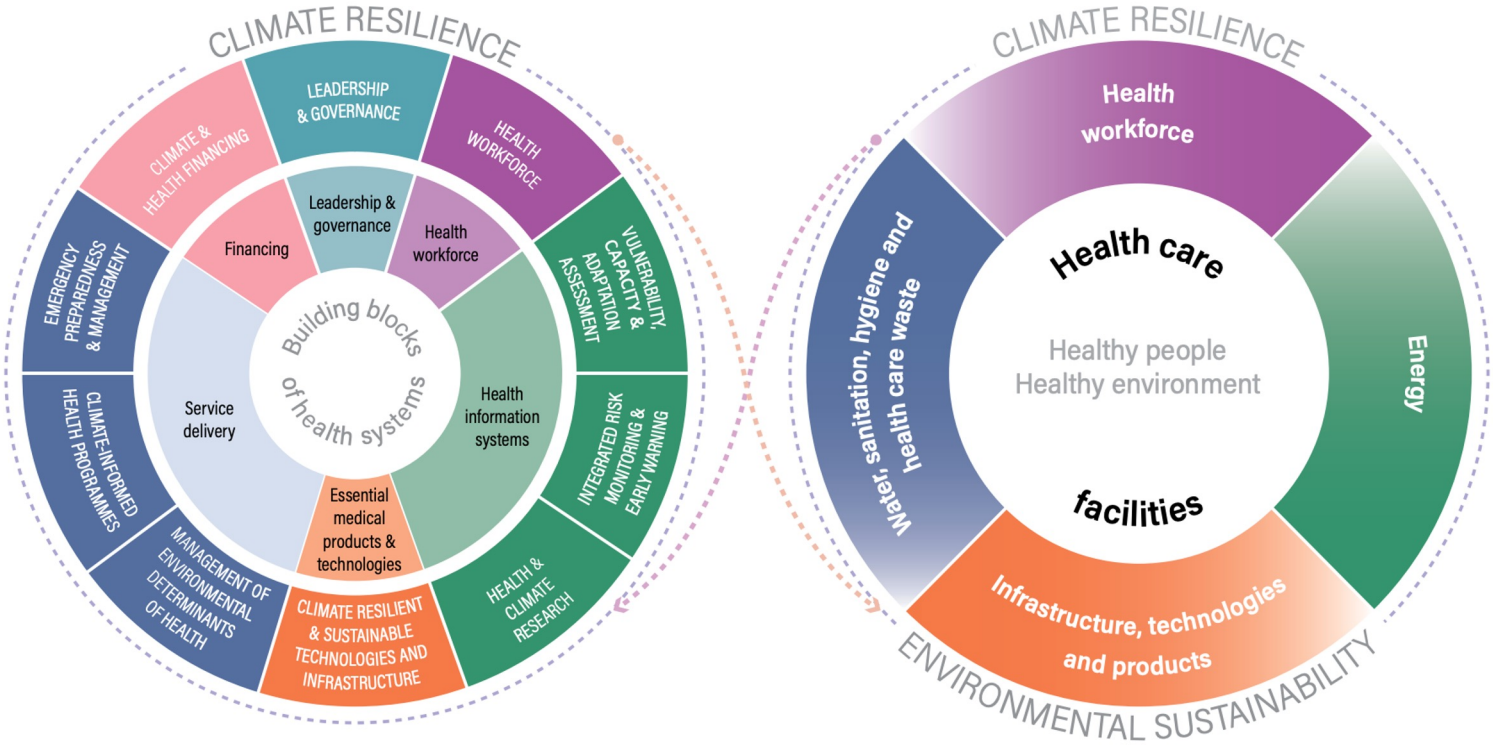
# “4-5% of total GHG emissions in the world are produced by the health care sector”

* Picture: Hospital Universitario Austral, Argentina. Tracks GHG emissions since 2016 and is committed to net zero

# One integrated approach

## WHO Guidance for climate resilient and environmentally sustainable health care facilities

Health Care Without Harm




https://www.who.int/publications/i/item/9789240012226

# One integrated approach

## WHO Guidance for climate resilient and environmentally sustainable health care facilities

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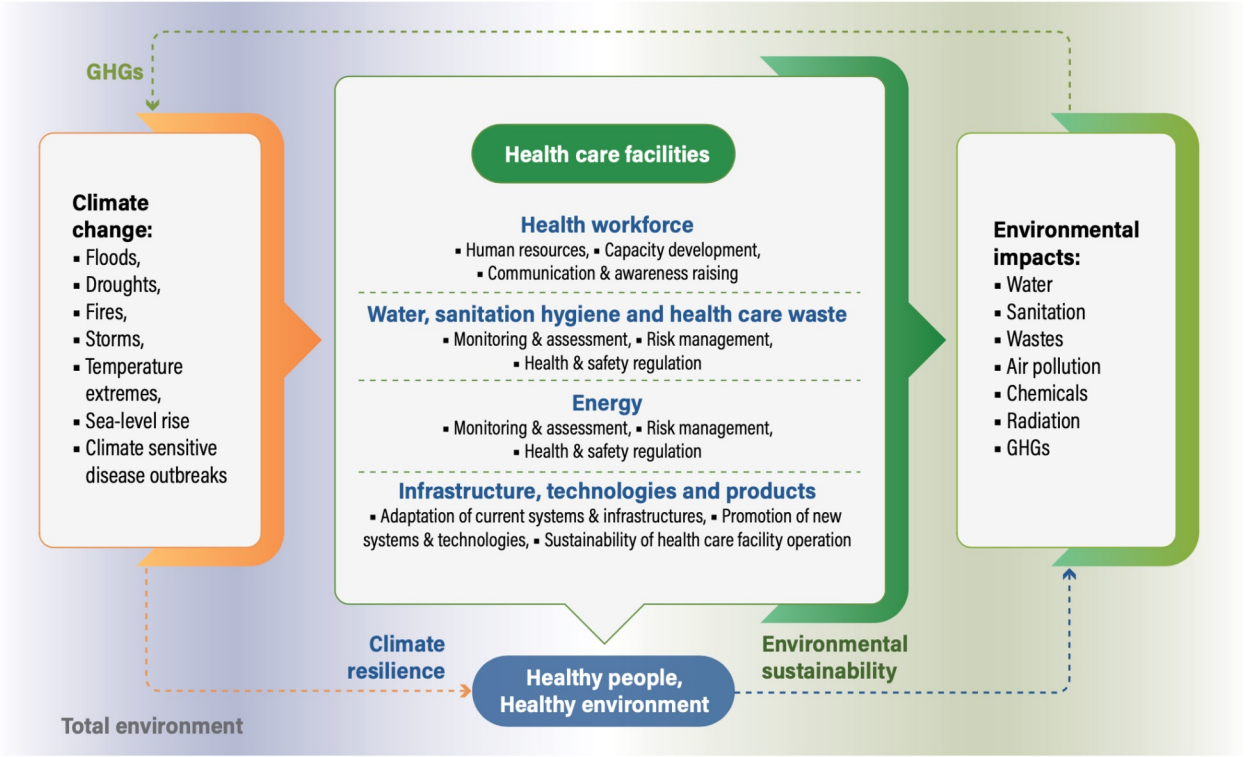


https://www.who.int/publications/i/item/9789240012226

# Towards a r
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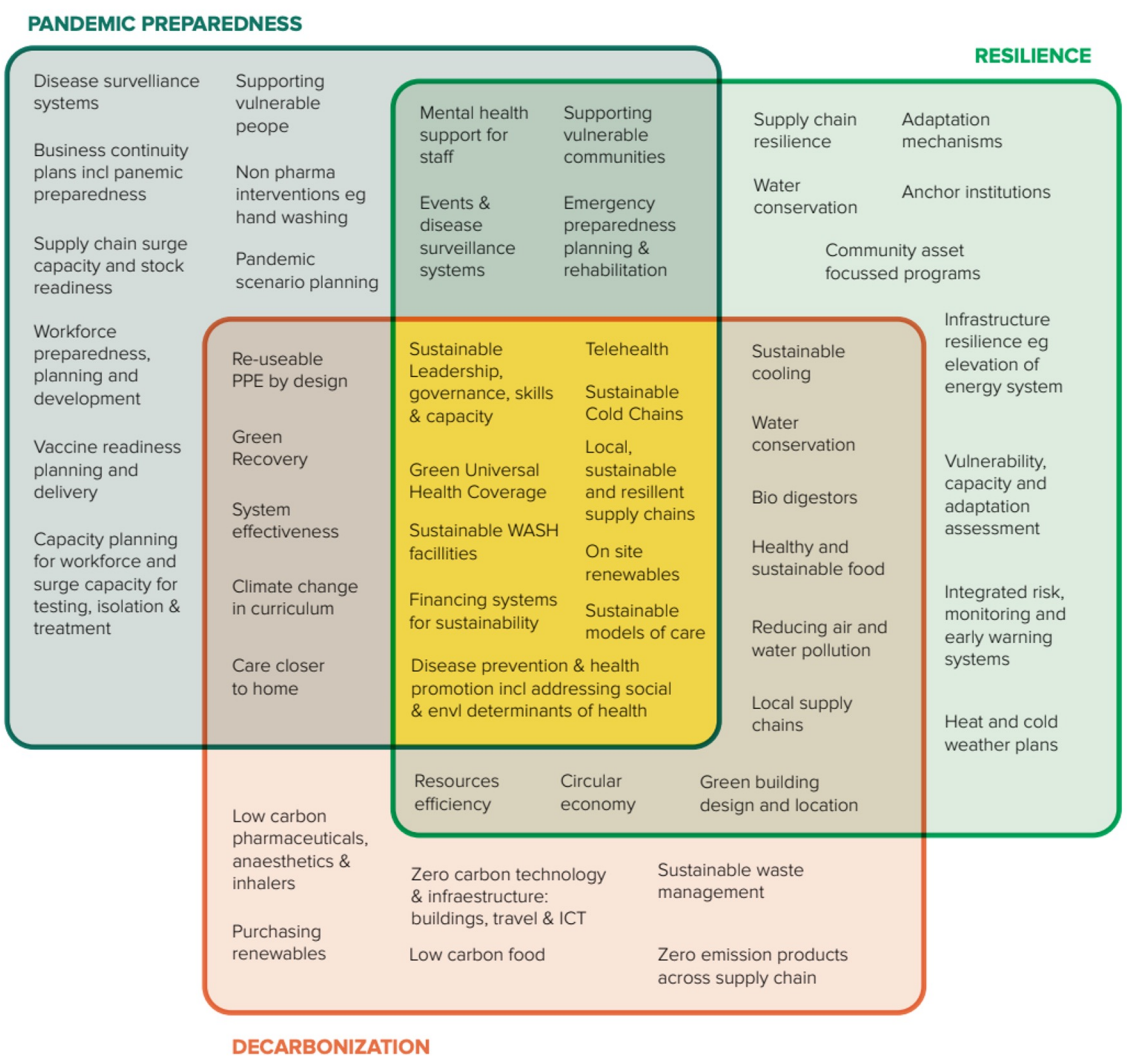
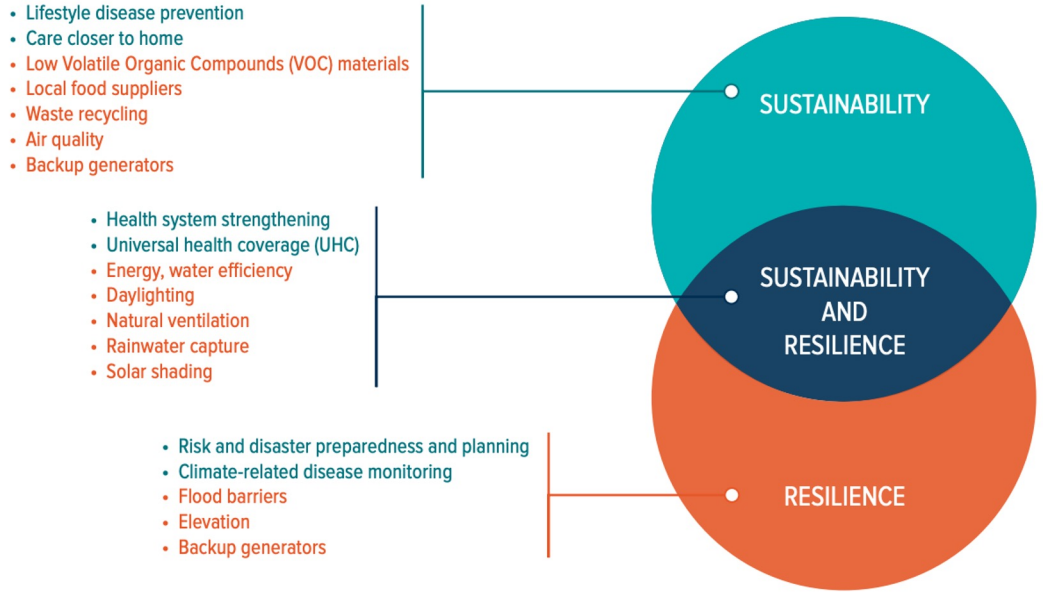
Health Care Without Harm



# Towards a new model that integrates decarbonization, resilience and pandemic preparedness




World Bank (2021). COVID-19 and Climate-Smart Health Care: Health Sector Opportunities for a Synergistic Response to the COVID-19 and Climate Crises.

Integrating climate-smart health care into COVID-19 response and recovery

- Public health surveillance and risk assessment
- Emergency preparedness, planning and rehabilitation
- Capacity for testing, isolation and treatment
- Supply of essential medical commodities
- Health services for non-COVID 19 conditions
- Non-pharmaceutical interventions
- Public health risk communication
- Vaccine readiness, procurement and deployment
- Building back better

# Sustainable Procurement in health systems- Climate-smart health care during COVID-19

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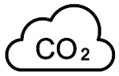
## COLOMBIA

### DISPOSABLE GOWNS

**36,000 less units**
purchased per month

**3.6 tons less**
of biological waste per month




**5.43Ton $CO_2$eq less**
produced per month

**$82,700**
saved per month

### PPE

**Decontamination**
of N95 masks

**500,000 less**
PPE items disposed of per month

**9 tons less**
of biological waste per month

Biohazardous waste
Autoclave in Costa Rica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**Climate-smart health care: action at the national and at the facility level**

# Climate and health opportunities for action

## COP26 Health programme

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So far, 57 countries have formally committed to develop climate resilient and low carbon, sustainable health systems:

**18**

Signed net zero commitment (Perú)

**52**

Committed to work for sustainable and low carbon health care systems

Argentina, Belize, Chile, Colombia, Costa Rica, República Dominicana, Jamaica, Panamá

**56**

Committed to build Climate resilient systems

Argentina, Bahamas, Belize, Colombia, Costa Rica, República Dominicana, Jamaica, Panamá

# Climate and health opportunities for action

## COP26 Health programme

Health Care Without Harm

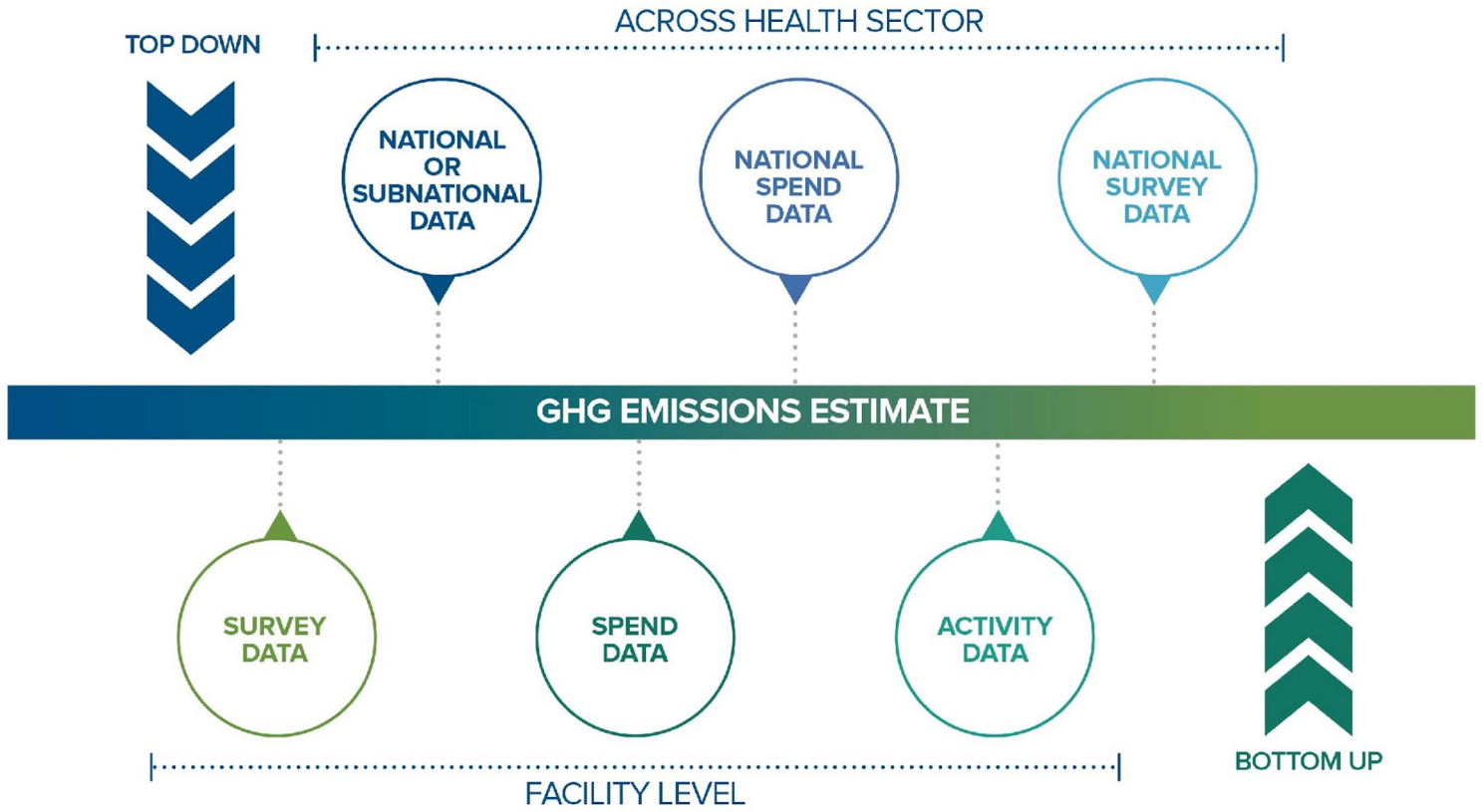
**LAC countries that have joined the COP26 Health Programme:**

- Argentina
- Bahamas
- Belize
- Chile
- Colombia
- Costa Rica
- Dominican Republic
- Jamaica
- Panama
- Peru

# Climate and health opportunities for action

## COP26 Health programme

Health Care Without Harm



# The health sector's carbon footprint in the LAC region

Health Care Without Harm

**Gráfico 6. Distribución de emisiones reportadas por nivel de complejidad y alcance (2019)**

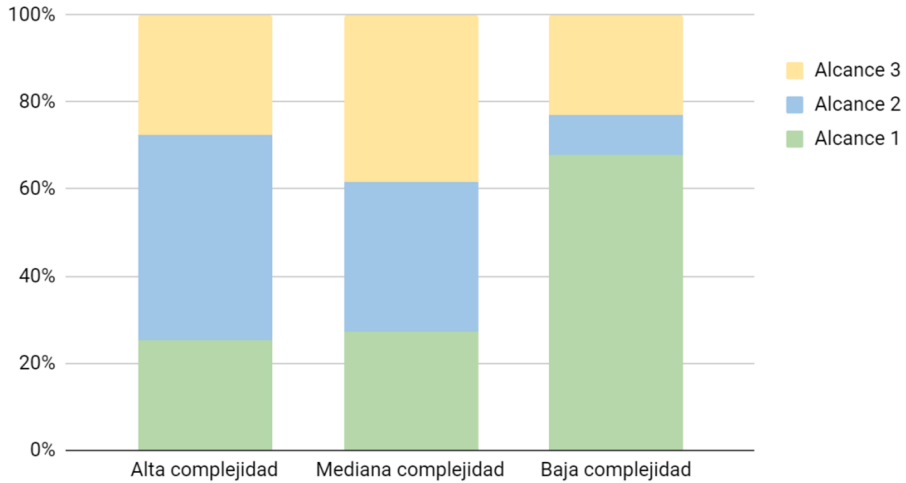
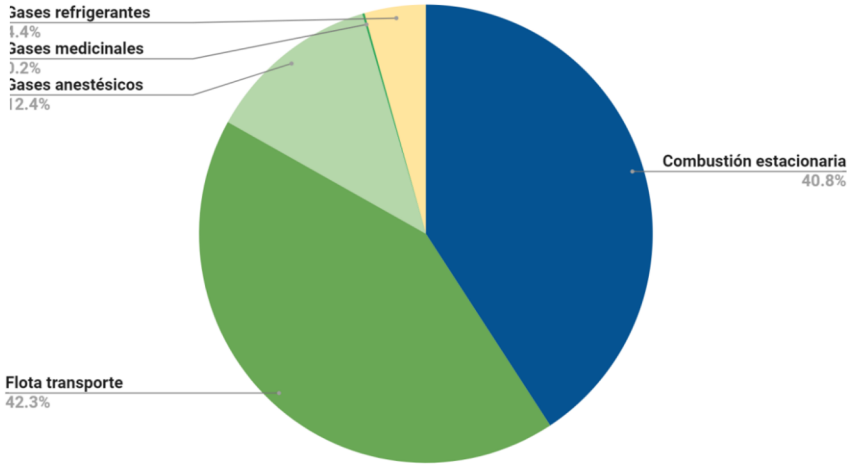



**Gráfico 7. Composición de las emisiones reportadas para el alcance 1 (2019)**




https://www.hospitalesporlasaludambiental.net/informes-avance/

# Health care climate action in the LAC region: Colombia case study

Health Care Without Harm

La salud es de todos | Minsalud

Buscar Todo | Buscar

Mapa del sitio | Funcionarios | Zona Interactiva | English Version

Inicio | Transparencia | Servicios al ciudadano | Ministerio | Salud | Protección social | Normativa | Comunicaciones

## Minsalud firma memorando de entendimiento con organización "Salud sin Daño"

Ministerio de Salud y Protección Social > Minsalud firma memorando de entendimiento con organización "Salud sin Daño"

*13/02/2022*
*Boletín de Prensa No 114 de 2022*

Audio de Juan Carlos Bernal, coordinador del Grupo de Cooperación y Relaciones Internacionales.

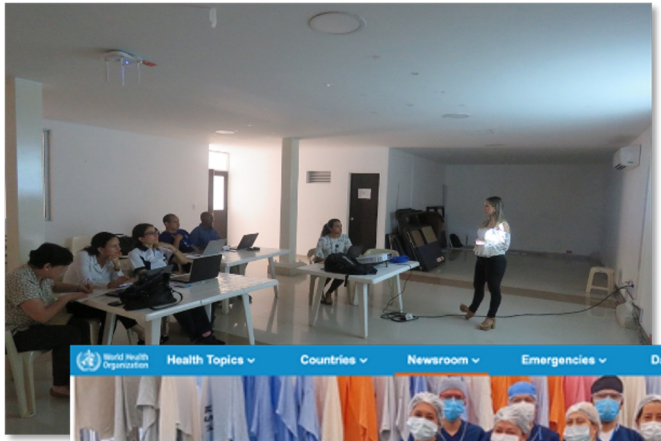
**Bogotá, 13 de febrero de 2022.** – El Ministerio de Salud y Protección Social y la organización no gubernamental internacional Salud sin Daño firmaron memorando de entendimiento para realizar un proyecto que permitirá estimar la huella climática del sistema nacional de salud colombiano.

*Colombia se convertirá en el primer país de la región en llevar a cabo un ejercicio exhaustivo de estimación de la huella de carbono de su sistema nacional de salud.*

El anuncio de la firma del acuerdo de colaboración se da en el marco del lanzamiento del Programa de salud de la COP26, en el que más de 50 países de diferentes regiones se han comprometido a desarrollar sistemas de salud resilientes al clima, sostenibles y bajos en emisiones.

"Colombia fue uno de los diez países de América Latina y el Caribe que presentaron su compromiso en el marco de la vigesimosexta Conferencia de las Naciones Unidas sobre Cambio Climático (COP26) y, con la firma de este memorando de entendimiento, avanza en los primeros pasos hacia la implementación para impulsar la descarbonización del sistema de salud colombiano", explicó Juan Carlos Bernal, Coordinador del Grupo de Cooperación y Relaciones Internacionales.

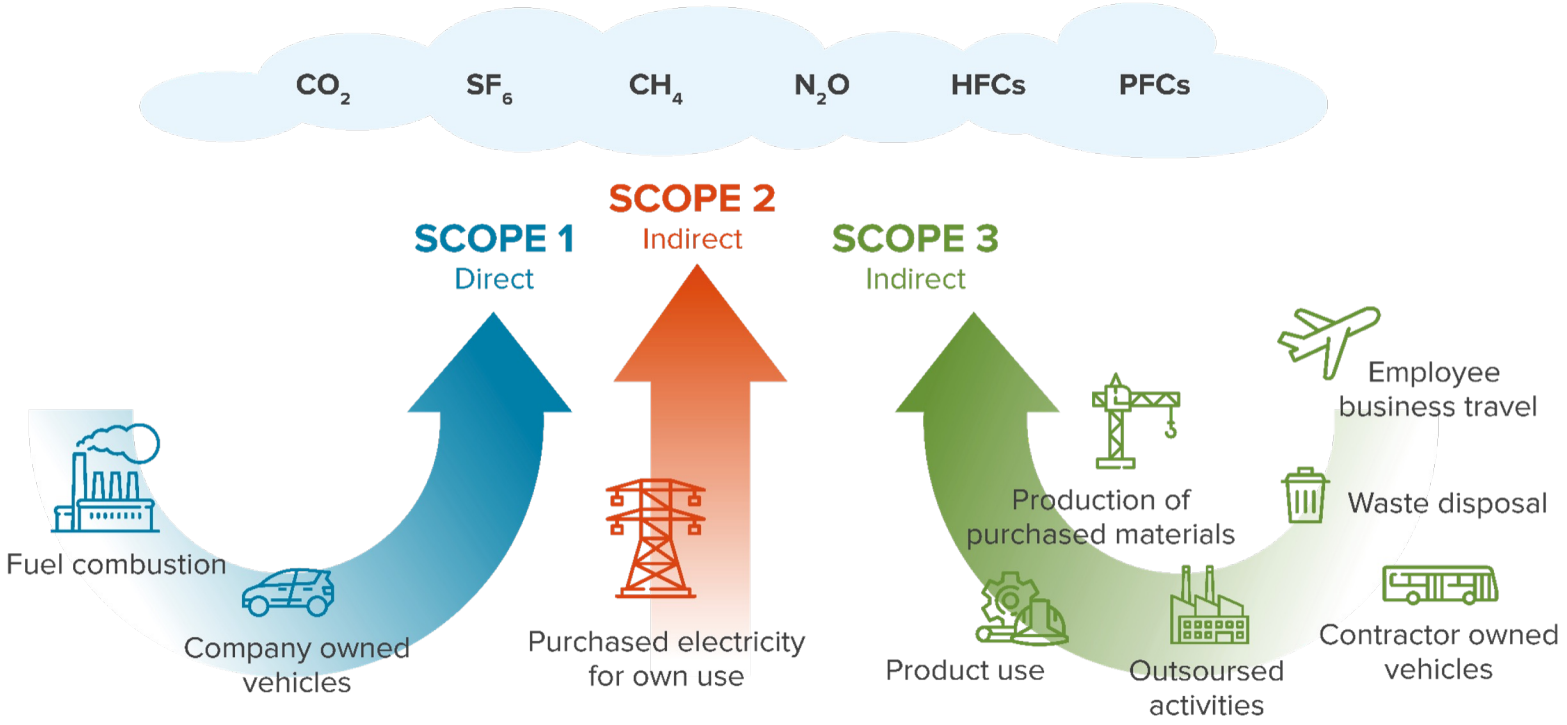
Señaló que los equipos técnicos de ambas organizaciones ya están trabajando en conjunto para diseñar un cronograma de actividades y avanzar en la implementación del proyecto, cuyos resultados están previstos para inicios de 2.023.



World Health Organization | Health Topics | Countries | Newsroom | Emergencies | Data | About WHO

**Decarbonizing health care at the facility level in Colombia**

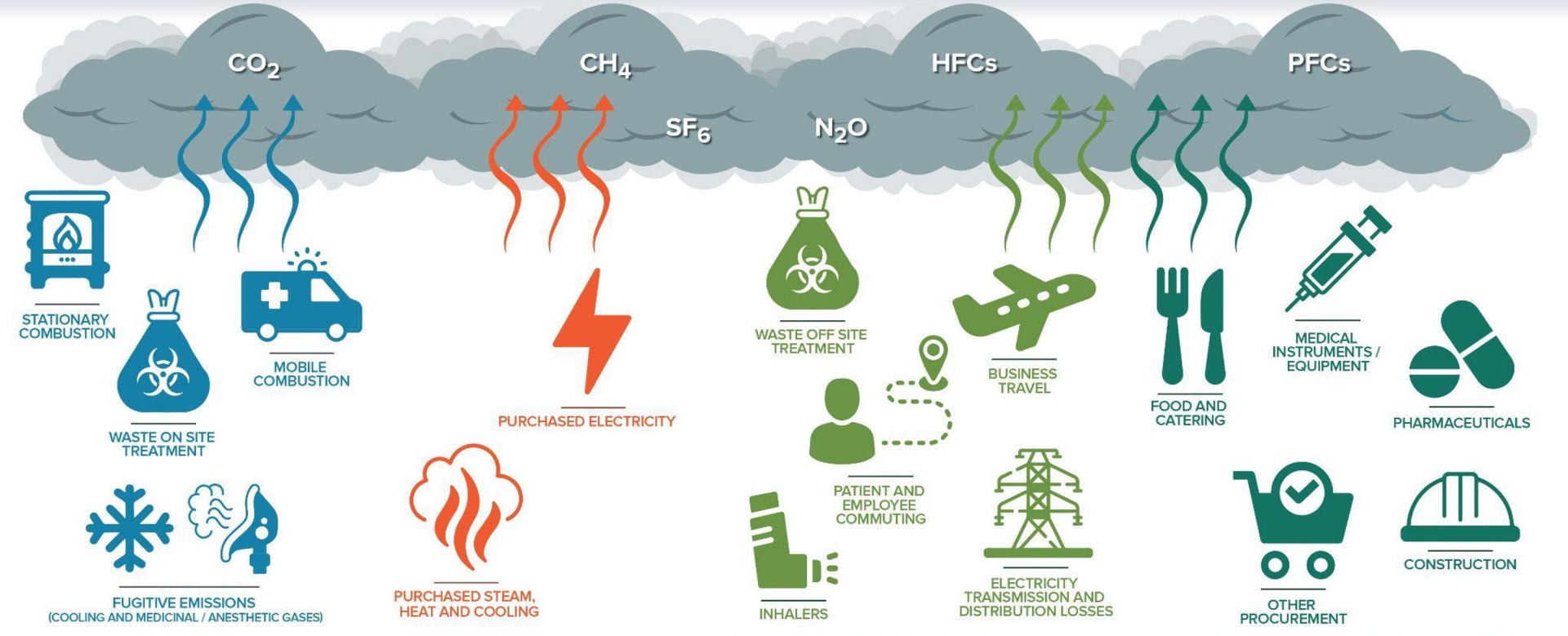
# Greenhouse gas emissions: Scopes




**Source:** Graphic adaptation of the Greenhouse Gas Protocol (GHGP)[5].

# Climate Impact Checkup tool

Health Care Without Harm




| SCOPE 1 | SCOPE 2 | SCOPE 3 | WITH EXTRA SUPPLY CHAIN |
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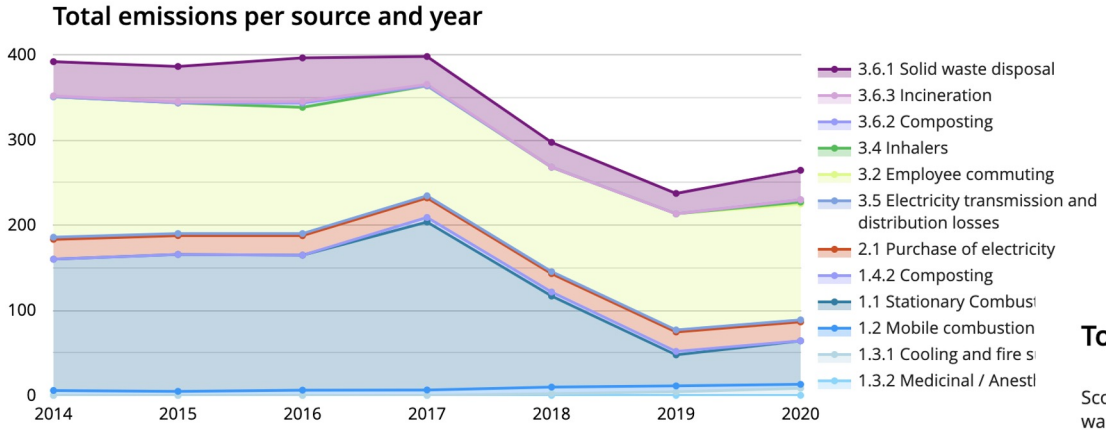
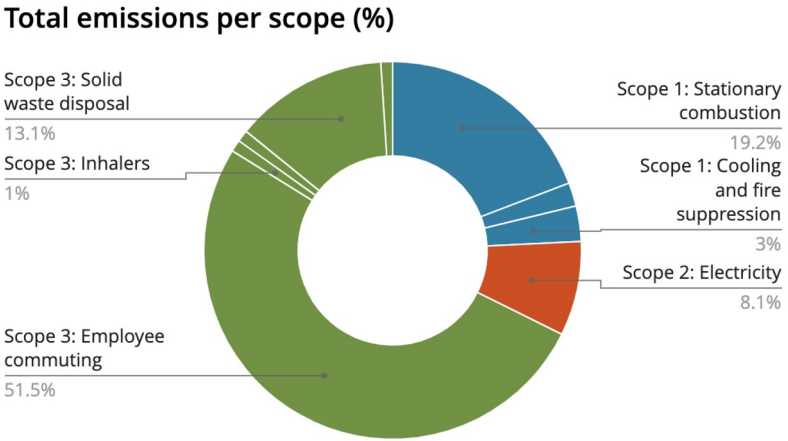
# What does a carbon footprint look like?

Health Care Without Harm




*Real data from a medium complexity institution sharing data with HCWH

# Institutions already using Climate Impact Checkup

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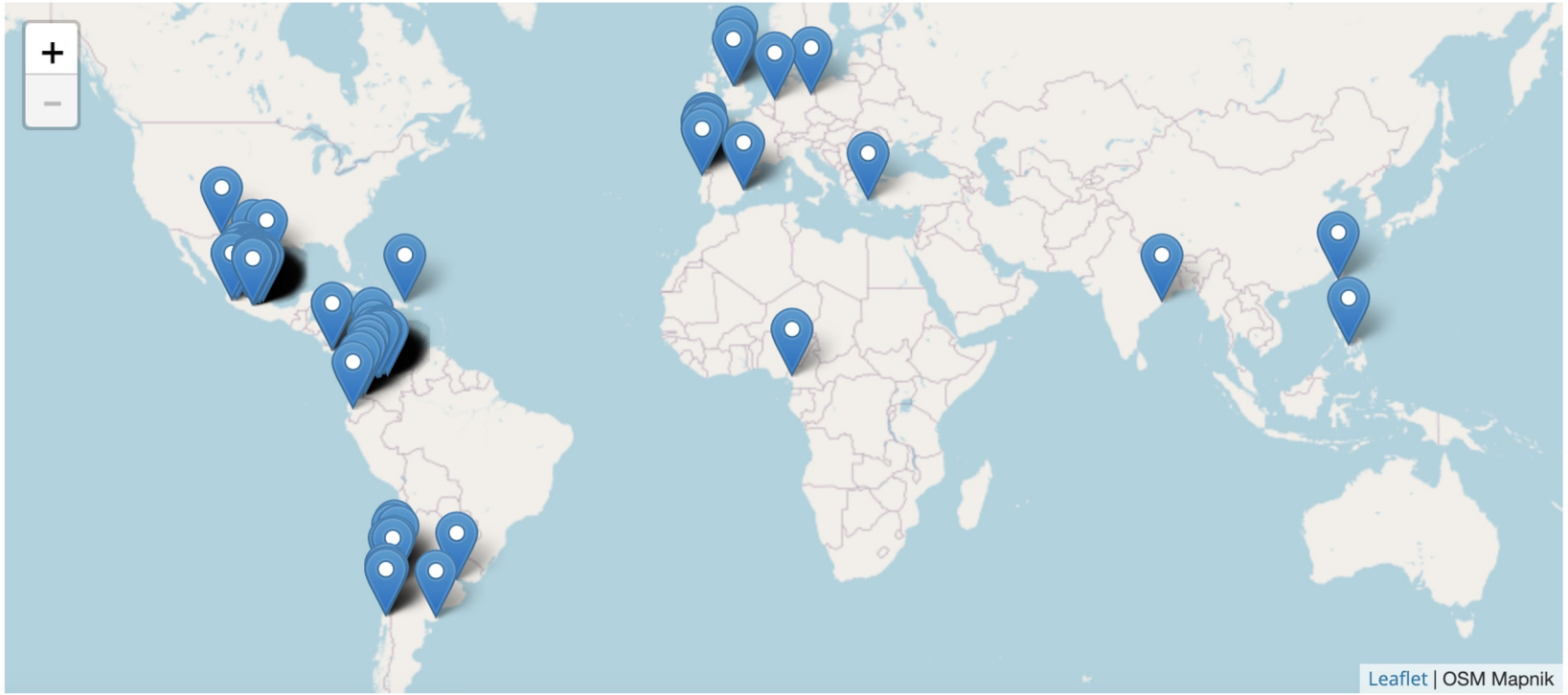
## Global Carbon Footprint Tool Submissions

Total number of Carbon Footprint Tool submissions: *298*



# Zoom Poll Question 2

- Is your institution/organization already estimating its carbon footprint, or is in a position to do so? If not, what is the main challenge that your institution/organization faces to calculate its carbon footprint?
  - Yes - We are already calculating our carbon footprint
  - Yes - We have the capacity but haven't started yet
  - No - We lack the necessary data
  - No - We lack the technical capacity to undergo the analysis
  - No - We do not have the resources, including dedicated personnel
  - No - It is not a priority for our institution/organization
  - No - Other reasons

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CIMH

# How can your institution get involved?

- Health Care Climate Challenge
- Race to Zero campaign
- If your country joined the COP26 Health Programme, ask your government how your institution can help and participate

# How can you get involved?

- Think about what you as an individual can change in your daily practice from tomorrow onwards
- Talk with your peers
- Ask if your institution has a sustainable, resilient and low carbon action plan
- If your institution does not have a plan yet, contribute so it can develop its baseline. We can help : )

*Images from GGHH members in Colombia and México

# References and resources

- Health Care Without Harm | Health Care Climate Action microsite: https://healthcareclimateaction.org/
- Climate Change is a Health Crisis: Health messages from the IPCC Sixth Assessment Report on Climate Impacts, Adaptation and Vulnerability (CAHA, 2022): https://assets.nationbuilder.com/caha/pages/27/attachments/original/1647402933/IPCC_Briefing_-_SM.pdf?1647402933
- WHO Guidance for Climate Resilient and Environmentally Sustainable Health Care Facilities: https://www.who.int/publications/i/item/9789240012226
- Glossary of climate terminology for health professionals (in Spanish): https://saludsindanio.org/glosarioCC
- Webinar recording | Climate change for beginners: introduction to the climate negotiations for health professionals (in Spanish): https://saludsindanio.org/seminario-web-cambio-climatico