

Strengthening climate resilient health systems

Webinar will begin shortly



Image: UN Women/Mohammad Rakibul Hasan via Flickr

Welcome to

Strengthening climate resilient health systems

9th May 2024



Image: UN Women/Mohammad Rakibul Hasan via Flickr

Strengthening climate resilient health systems

Chair

Dr Sushil Baral
Director
HERD International, Nepal



Strengthening climate resilient health systems

Welcome

Presentations

- How can climate resilience be mainstreamed in government policy? ~ *Elizabeth Gogoi*
- Supporting government strategy for a climate resilient health system: learning from Pakistan ~ *Dr Mahwish Hayee*
- How can climate resilience in the health sector be financed? ~ *Kenneth C Ene*

Panel discussion

- Dr Renzo Guinto
- Helen Yaxley

Any questions?



Strengthening climate resilient health systems

Speaker

Elizabeth Gogoi
Principal Consultant
Climate Change Portfolio
OPM India



Mainstreaming Climate Resilience

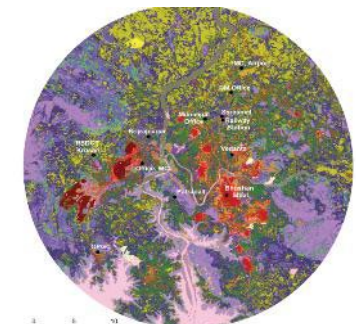
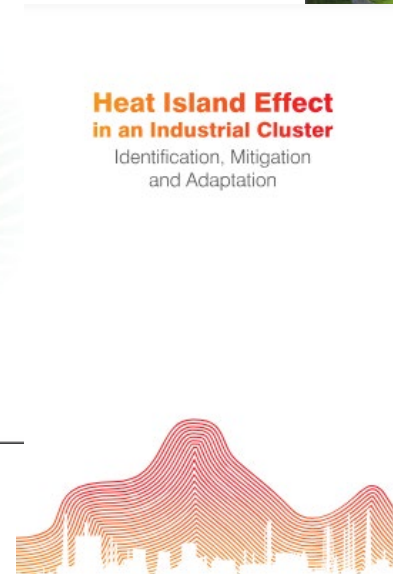
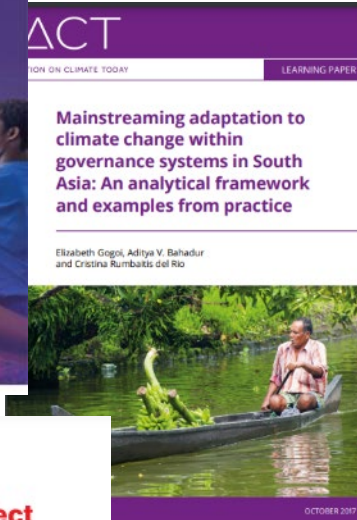
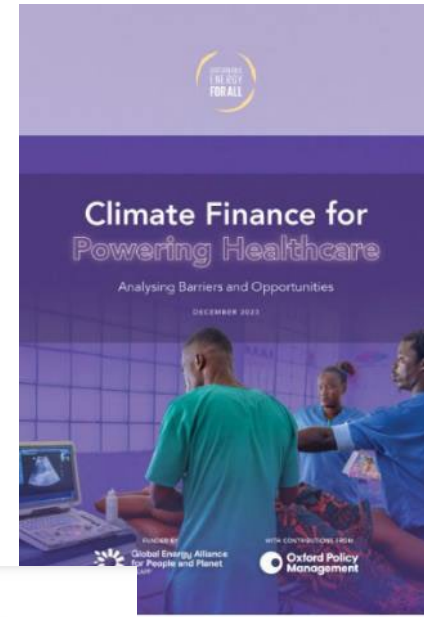
Elizabeth Gogoi, Principal Consultant,
Climate, Sustainability and Resilience (CRS) Practice
Oxford Policy Management (OPM) India

May 2024



Contents

- **Climate mainstreaming – what does it actually mean?**
- **Relevant learning on mainstreaming climate resilience to policies, plans and institutions**



Why Climate Mainstreaming?

*“The framework components should be used to **mainstream climate change into sector wide and/or vertical programmes**, as well as guide the holistic design of policies, plans and strategies aiming to strengthen climate resilience and/or reducing GHG emissions and environmental impacts of health systems”*

WHO Operational Framework 2023 for building climate resilient low-carbon health systems



Entry-points for Climate Mainstreaming

What are the...

For a health...

Project
Scheme
Regulation
Budget
Policy

Risks FROM climate?

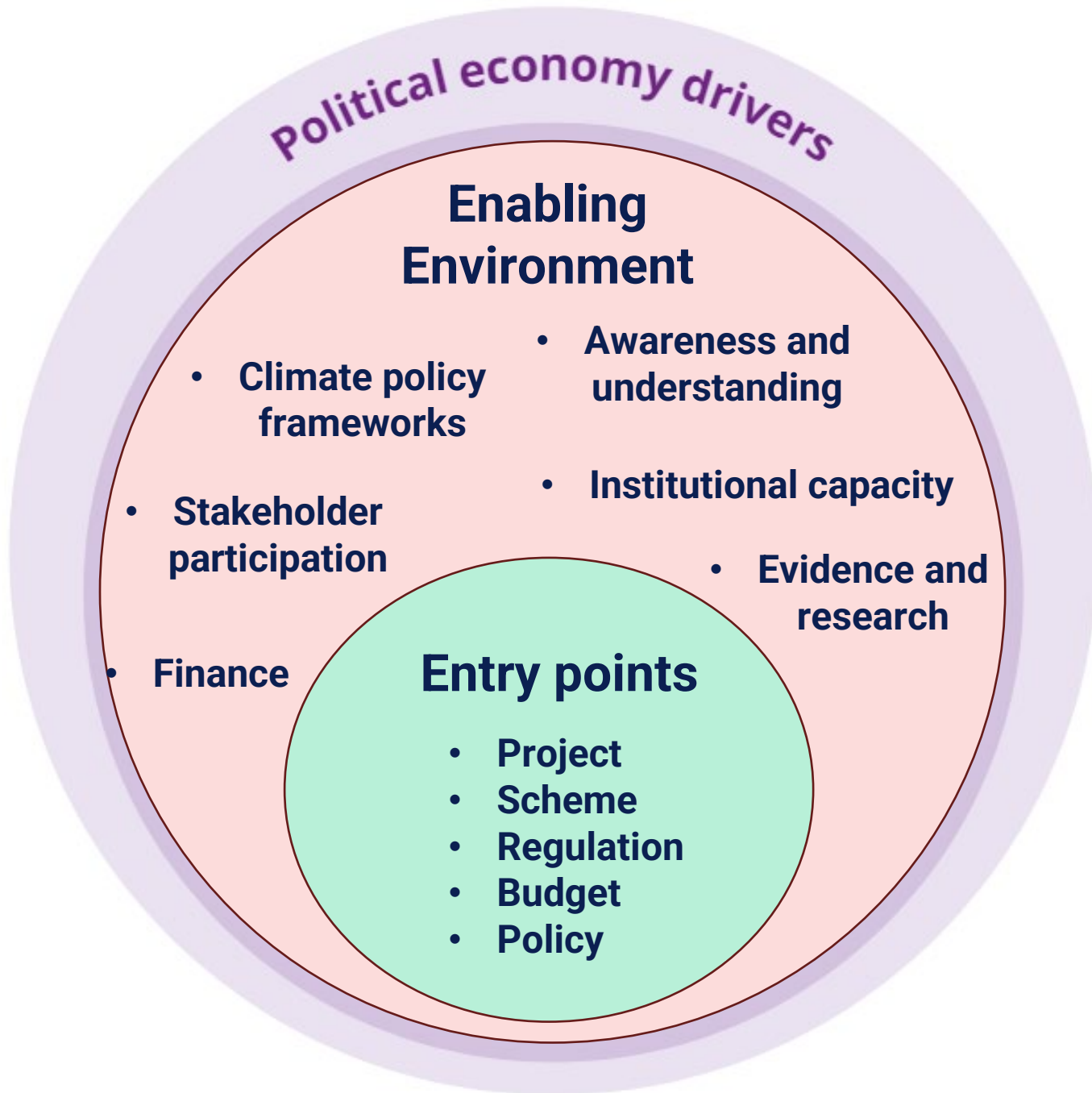
Options for INCREASING resilience
benefits?

Potential to WORSEN climate impacts?

Possible NEW resilience actions?

Therefore...

DROP
EXPAND
AMEND
ADD



**How does
Climate
Mainstreaming
happen?**

e.g. Climate mainstreaming for a health sector in Kerala, India

- **Evidence and research:**
Health Vulnerability and Adaptation Assessment
- **Climate policy frameworks:**
State Action Plan on Climate Change
- **Institutional capacity:**
Communities of Practice on Climate Change

Entry-points:

E.g. erratic temperature and rainfall: increases spread of water-borne and vector-borne diseases.

Integrating climate data into disease surveillance and warning systems

→ Increase access of health services to climate vulnerable communities

Safe drinking water infrastructure



e.g. Climate mainstreaming to address extreme heat impact in Jharsuguda, India

- **Political commitment:** Extreme heat an existing priority

- **Evidence and research:**
Remote sensing of thermal hotspots, thermal sources and sinks etc
- **Awareness and understanding:**
Understanding non-climate causes of extreme heat

Entry-points:

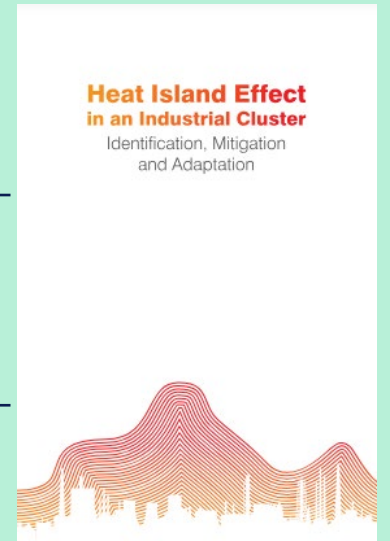
Extreme heat (~50°C) affects health and economic productivity. Due to changes temperature AND **changes land cover and energy intensive industry**



Changes in coal stockpiling and management

Early warning systems and preparedness

Urban planning to reduce congestion



e.g. Climate mainstreaming for public health facilities in Nepal

- **Finance:** Supporting SEforAll and partners to understand opportunity and limits of climate finance for health facilities
- **Evidence and research:** Quantification of 'climate rationale' of low-carbon and resilient investments

Entry-points:

Flood, heat etc **damaging buildings and disrupting critical services**

(e.g. electricity and road access) →

12% have a diesel generator = 97 tonnes CO₂e per year



Decentralized RE system



Energy efficient appliances



Energy efficient buildings



Climate resilient buildings

Thank you!

Elizabeth.Gogoi@opml.co.uk



Strengthening climate resilient health systems

Speaker

Dr Mahwish Hayee
Principal Consultant
Health Systems Strengthening
OPM Pakistan



A Rapid Scoping Study and Framework of Action for Climate-Resilient Health Systems in Pakistan

Dr Mahwish Hayee

9 May 2024



Why we conducted the study

? To assess the extent to which climate resilience is addressed in health policies, planning, and programme implementation in Pakistan, identifying major gaps and weaknesses.

Thank you to FCDO and M/oNHSR&C' support

8th most climate-vulnerable country ¹

33 million displaced and 1700 dead in the 2022 floods ²

Pakistan committed to two objectives in COP 26

- Building a climate-resilient health system
- Developing a low-carbon sustainable health system

1. Eckstein, David, Vera Künzel, and Laura Schäfer. "Global Climate Risk Index 2021."

2. [Pakistan Floods 2022: Post-Disaster Needs Assessment \(PDNA\) | United Nations Development Programme \(undp.org\)](#)

Our methodology



- Literature review of policies & peer-reviewed articles in Pakistan
- Key informant interviews with 18 organisations across government, academia, donors & nongovernmental organisations
- Adapting and contextualising findings against the WHO Operational Framework for Building Climate Resilient Health Systems



Developed a Framework of Action



Recommendations across **six** building blocks of health: Leadership & Governance Health Workforce; Service Delivery; Finance; Essential Medicines; Information Systems

Findings and Recommendations (1)



Leadership & Governance

Key Findings

Lack of Sectoral Linkages and Coordination:

- **Leadership and governance** in the health and climate domains are **not effectively interconnected**, which can challenge unified policy-making and action.
- A lack of a **coordination group among** key donors and stakeholders.
- A lack of **focus on health** in the climate policy and a lack of focus on climate in the **health policy**



Leadership & Governance

Key Recommendations

- Designate **focal points** within ministries to coordinate climate change and health initiatives.
- Develop a **coordination group** with key donors and stakeholders.
- Establish **cross-sectoral policy** and technical working group.
- Update the **National Climate Change Policy** to include health as a focus area.
- **Strengthen local leadership** to integrate climate resilience into health services.
- Aligning the next **National Health Vision** with climate-resilient plans.

Findings and Recommendations (2)



Health Workforce

Key Findings

- **Absence of undergraduate or postgraduate** (medical or public health courses) **or in-service** training courses specifically addressing climate resilience in health.
- Insufficient **integration of climate** and health policy research within existing institutions.
- Limited **capacity** and **response** planning in health care facilities in Pakistan.



Health Workforce

Key Recommendations

- Initial **professional development** for health professionals through short courses.
- Develop **undergraduate and in-service training courses** approved by the PMDC and PNC on climate resilience in health.
- Establish a **teaching/research hub for climate and health** policy in MOH
- Develop institutional **contingency plans** concerning climate change impacts at primary, secondary, and tertiary public facilities.
- Regulatory bodies mandate the public and private sectors to develop **contingency plans**.

Findings and Recommendations (3)



Health Finance

Key Recommendations

- **Pakistan has two accredited** organisations for applying for GCF grants and seven active grants.
- **Inadequate development** of proposals that address climate-sensitive diseases and related **health determinants at the government level.**



Health Finance

Key Recommendations

- Intensify efforts to **access international climate financing** and develop proposals for **adaptation towards health system resilience.**
- M/o CC & EC, a National Designated Authorities (NDAs) 1 or Focal Points, **can collaborate** with the MOH to **leverage the climate fund** for designing and implementing climate-resilient health systems projects.
- Develop **proposals addressing climate-sensitive diseases** and co-determinants of health, such as WASH, agriculture, food security, and transport.

Findings & Recommendations (4)



Climate-Smart Technology & Climate-Resilient Infrastructure

Key Findings

- **Most health facilities at the public sector level** are not equipped for climate change.
- A lack of conducting **greenhouse gas (GHG) emission** assessments within the health sector
- Most Public Sector Health Facilities do not have renewable energy sources



Climate-Smart Technology & Climate-Resilient Infrastructure

Key Recommendations

- Investigate **global best practices** for enhancing or retrofitting facilities for **climate resilience** and adaptability of health infrastructure to climate change.
- **Evaluate** and determine the feasibility of **new, climate-smart** technologies in the health sector for reduced emissions.
- **Assess GHG emissions** within the health sector.
- Review **supply chain mechanisms** under extreme climatic conditions.
- Explore **renewable energy** sources for healthcare facility power generation.

Findings & Recommendations (5)



Service Delivery

Key Findings

- Most health facilities are not well **equipped to respond** to and treat health emergencies related to climate change, such as **heatstroke**.
- For **PHCs**, a package of health services in climatic or **humanitarian emergencies** is not well defined.



Service Delivery

Recommendations

- **Health facilities** should have protocols and SOPs to manage heatstroke and exacerbated climatic health issues and better surveillance of climate issues.
- **Community Health Workers and Lady Health Workers** should inform the community and local population how to respond to the health impacts of climate change.
- Develop a **Basic Health Services Package** for Humanitarian conditions.

Findings & Recommendations(6)



Health Information Systems

Key Findings

- Lack of existing research on **climate health** vulnerabilities and adaptation
- Lack of defined **baseline indicators** for Climate Change
- No linkages of Early Warning Systems for Climatic Events with health services



Health Information Systems

Key Recommendations

- Conduct a **CHVA** in Pakistan
- Establish a system of **periodic reviews** of health climate vulnerabilities.
- Establish a monitoring and evaluation mechanism for health risks associated with climate change.
- GOP to develop and define **Pakistan's baseline indicators** for climate change.
- Development of **climatic early warning systems** linked with provincial and district health depts and hospitals.
- Review the **IDSR and DHIS II system** and identify the most climate-sensitive diseases amongst the list of 33 priority diseases.

Current Status

Policy-Level Actions

Action(s)	Status	What it achieves
MTR of the NHV → identification of climate and health nexus as a weakness	Complete	Revised NHV will include a specific section on the climate and health nexus ensuring Pakistan's main policy document is aligned with the Framework of Action
Steering Committee, and Technical Working Group formed at the Federal Level	Complete	Sets up an official governance mechanism for coordinating climate and health initiatives at the highest levels

Programme-Level Actions

Action(s)	Status	What it achieves
Climate Health Vulnerability Assessment in KP	Ongoing	Provides policymakers an understanding of climate health vulnerabilities, and a blueprint for future assessments. Findings will inform operational decision-making and will also compliment policy lever recommendations.
Climate-Health Orientation Session for KP & Federal Health Officials	Complete	Improved health professionals' capacity, enhancing the health workforce's operational capability regarding climate-related health challenges.





Thank you

Strengthening climate resilient health systems

Speaker

Kenneth C Ene

Senior Technical Advisor
Climate Change Practice
OPM USA



Oxford Policy Management

How can climate resilience in the health sector be financed?

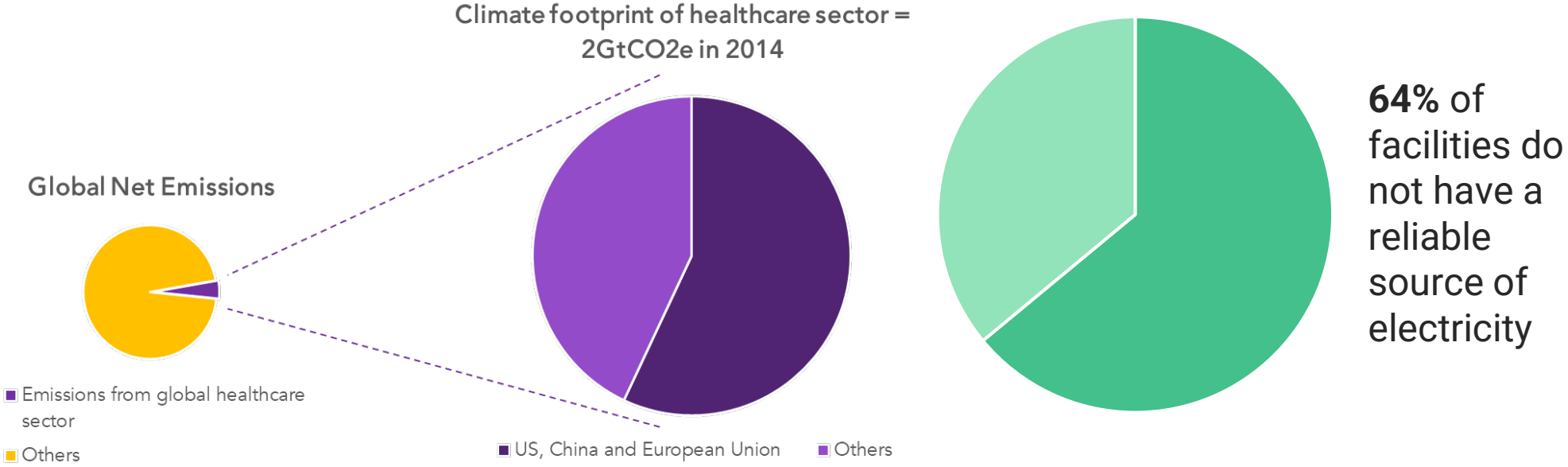
Presented by

Kenneth Ene, Senior Technical Advisor
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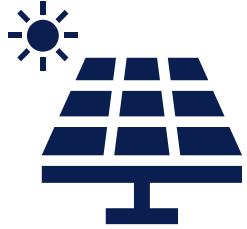
9th May 2024



The global healthcare sector is contributing to climate change... but in LMICs healthcare facilities have unmet energy needs



For example,



If one health facility replaced the use of a fossil fuel generator with a **stand-alone solar PV system**:

Mitigation benefits

It would save approximately 1.4 – 4.2 tonnes CO₂ per year

Financial benefits

It would save approximately 630 - 1,411 USD per year



If one health facility replaced the use of kerosene lamps with **solar lanterns**:

Mitigation benefits

It would save approximately 0.7-1.3 tonnes CO₂ and 0.3 - 0.6 tonnes BC per year

Financial benefits

It would save approximately 295 - 591 USD per year

For example,



Of the 5,681 healthcare facilities in Nepal

22% do not have a 'regular' supply of electricity



90% of grid electricity from hydropower and 2% is thermal

12% have a diesel generator



USD 36,500 spent by all facilities per year on ~38,987 litres of fuel to power the facility, representing **97 tonnes CO₂e.** (~10% of emissions from facility vehicles)

13% have on-site renewable energy system

Vulnerability

The healthcare system is already being impacted by climate change, which is projected to worsen in the future. For example, 600,000 additional people will become at risk of malaria, and 400,000 for dengue.

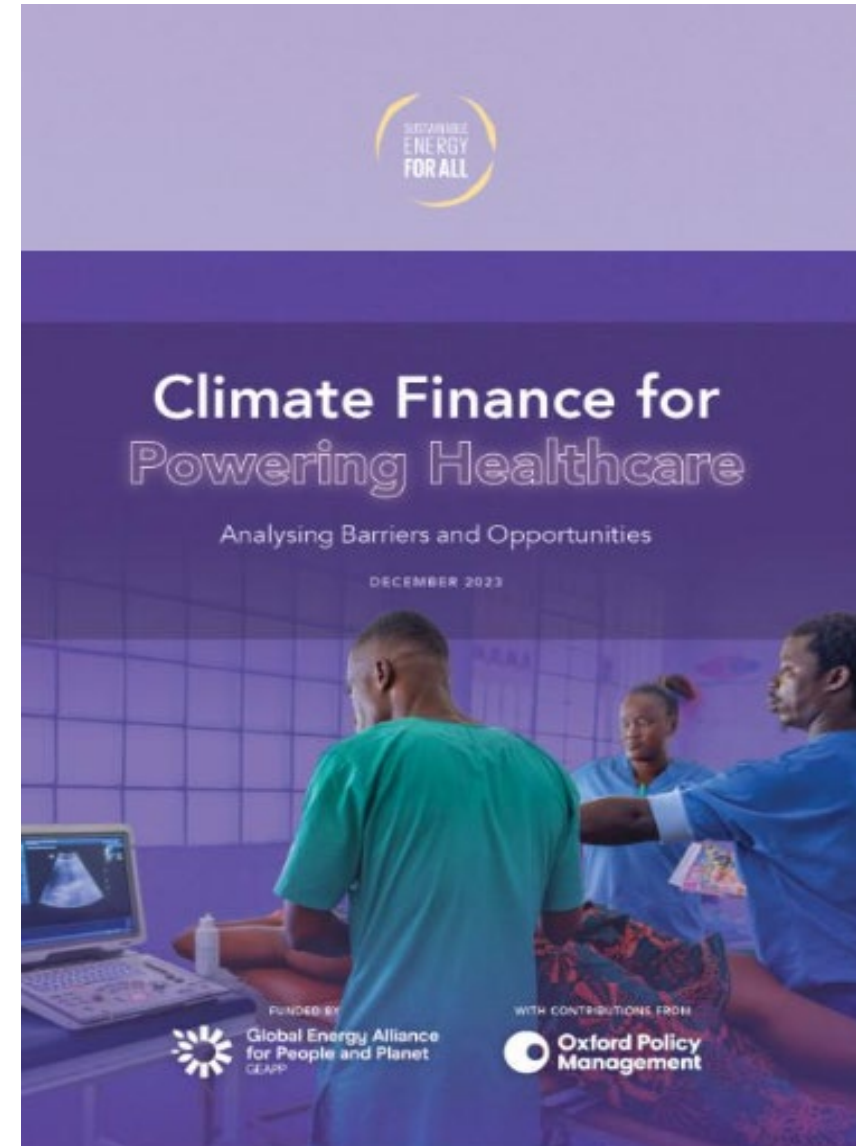
Increasing exposure of healthcare facilities to extreme weather events

Climate proofing & energy solutions offer direct health and financial benefits

	Direct health benefits	Direct financial benefits
Decentralized RE system	Allow 24/7 operation and new services. Reduced indoor air pollution from generators	Reduced expenses of fuel for generators
Energy efficient appliances	Reduced indoor temperature of facilities. Reduced indoor air pollution from kerosene lamps	Reduced expense of electricity from grid or fuel for generators
Energy efficient buildings		
Climate resilient buildings	Reduced indoor temperature of facilities. Reduced human injuries from damaged buildings	Reduced expense of electricity from grid or fuel for generators. Avoided cost of replacing damaged building and equipment

Climate Finance

- **Climate finance**
 - **what does it mean?**
- *Resources, grants, loans, etc provided by different entities to support the mitigation of GHG & adaptation to climate impacts*

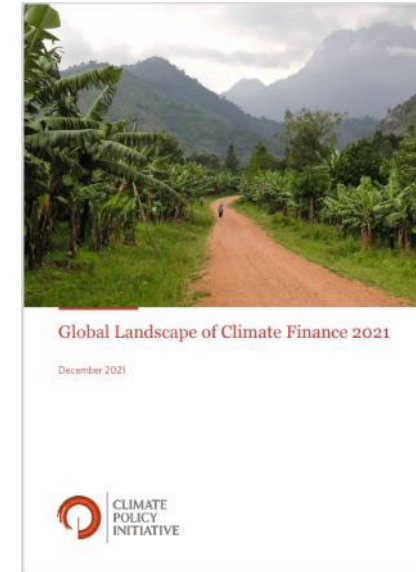


What is the potential for climate finance to advance electrification and climate-proofing of healthcare?



US\$ 4.9 bn is needed to electrify two thirds of healthcare facilities in 63 countries to deliver quality healthcare

US\$ 632 bn of climate finance was disbursed in 2019/2020 across the world.

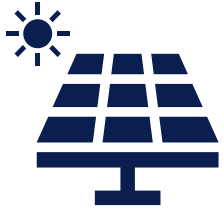


BUT: In reality, only a small proportion of climate finance has so far been used for climate-proofing healthcare (e.g. \$1,431 million for adaptation in the health sector)

Key findings: A single source of climate finance will not cover all the types of costs for climate proofing facilities

	BILATERAL FINANCE	MULTILATERAL FUNDS	PRIVATE FOUNDATIONS	CARBON / REC MARKETS	GREEN BONDS
Can it finance capital costs?	Yes	Yes	Yes	Partly	Yes
Can it finance operating costs?	Not typically	Not typically	Not typically	Yes	Not typically
Can it finance enabling environment?	Yes	Yes	Yes	Not directly	No
Can it finance health outcomes?	Yes	No	Depends	Not directly	No

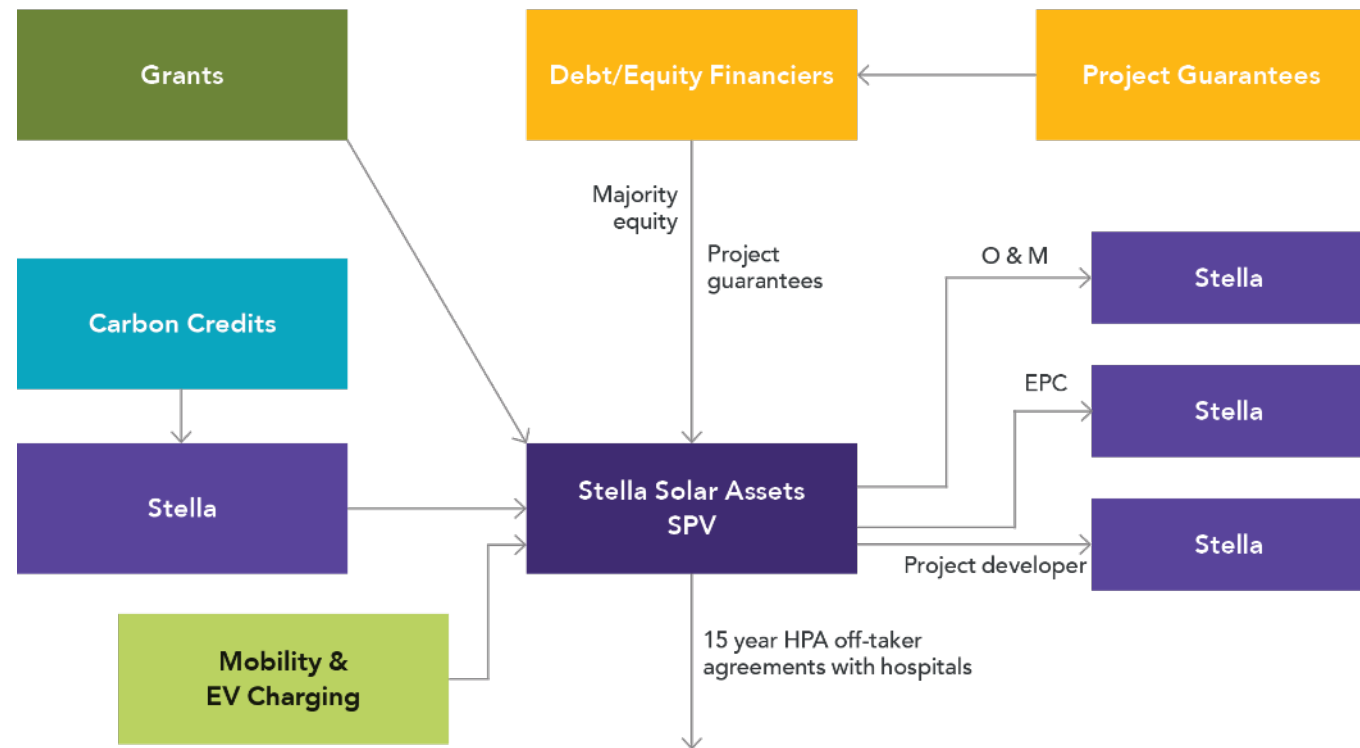
It is possible to utilize climate finance for powering healthcare?



Pilot in four health facilities in Ghana is combining climate finance and other sources for the installation and maintenance of solar energy systems

“The mix of carbon financing/ DREC’s, grants, and concessionary financing backed by project guarantees unlocks the viability of projects to provide affordable, reliable, and clean energy access to health facilities, while guaranteeing returns to investors.”

FRANCIS ASANTE
CEO Africa, Stella Futura



Examples of three key findings

The potential GHG emissions savings for a single healthcare facility is too small to attract climate finance on its own

Therefore, a climate finance project needs to cover many healthcare facilities, meaning a larger initiative is required.

Limited capacity of healthcare facility professionals to design, manage and report on a climate finance project

Therefore, more collaboration between healthcare, energy and climate finance experts

Digital Monitoring, reporting and verification (MRV) of energy, emissions and other results is needed but it is an additional cost

Therefore, digitalizing healthcare facilities is a prerequisite or needs to happen in parallel to designing a climate finance project.



Thank you

Strengthening climate resilient health systems

Discussant

Dr Renzo Guinto

Associate Professor
Global & Planetary Health
SingHealth Duke-NUS
Global Health Institute



Strengthening climate resilient health systems

Discussant

Helen Yaxley

Senior Policy Advisor
Climate Change & Health
FCDO



A woman in a purple and green patterned sari is carrying a young child in her arms. They are standing in a flooded area, likely a rural village. In the background, another woman in a black sari is talking to a man. The scene is set against a backdrop of trees and a simple building with a corrugated metal roof. The text "Any questions?" is overlaid in the center in a bold, yellow font.

Any questions?



Thanks for attending
rebuildconsortium.com



**Strengthening
climate resilient
health systems**