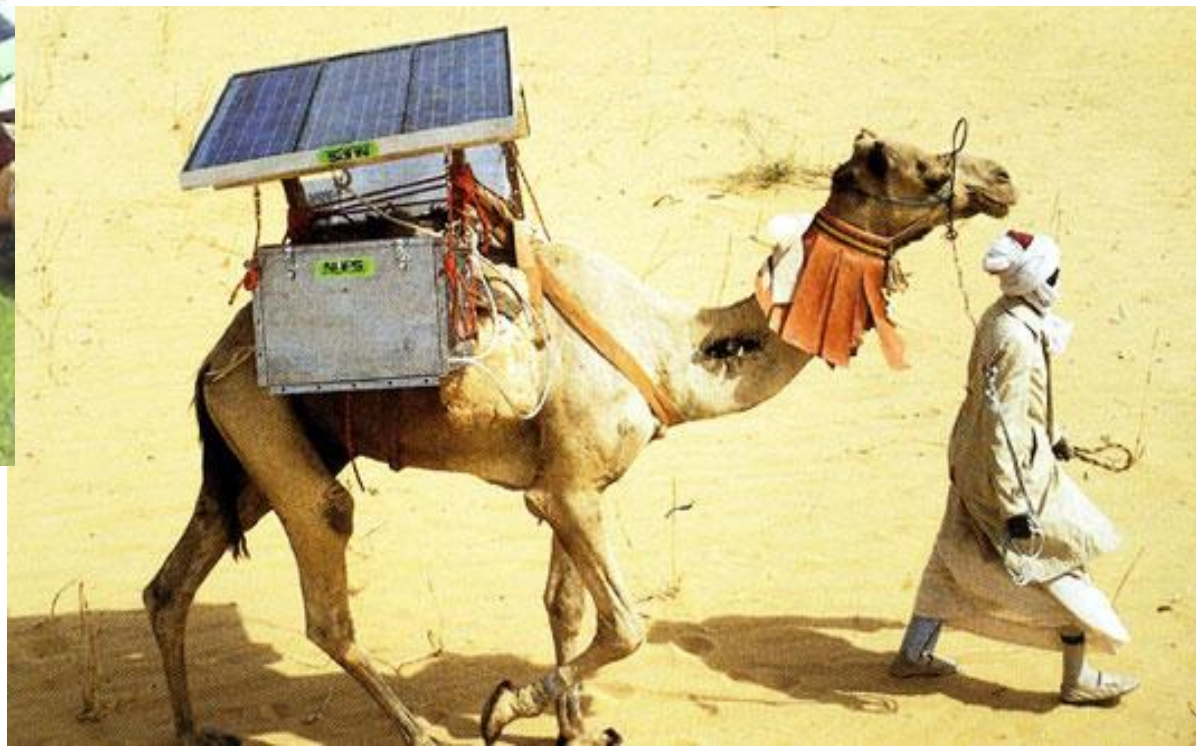


# Conference on Climate and Health Care

The role and strategy of the health sector  
in achieving global climate goals

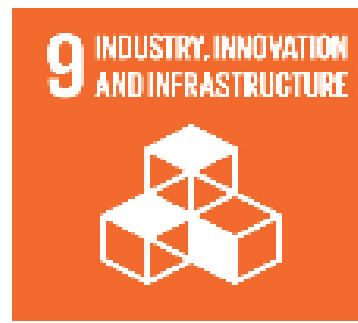
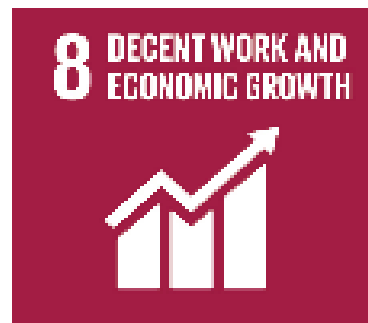


**Sonia Roschnik**  
Health Care Without Harm  
Europe



Transform health care worldwide so that it *reduces its environmental footprint* while mobilizing its ethical, economic and political influence to create an ecologically sustainable, equitable and healthy world.

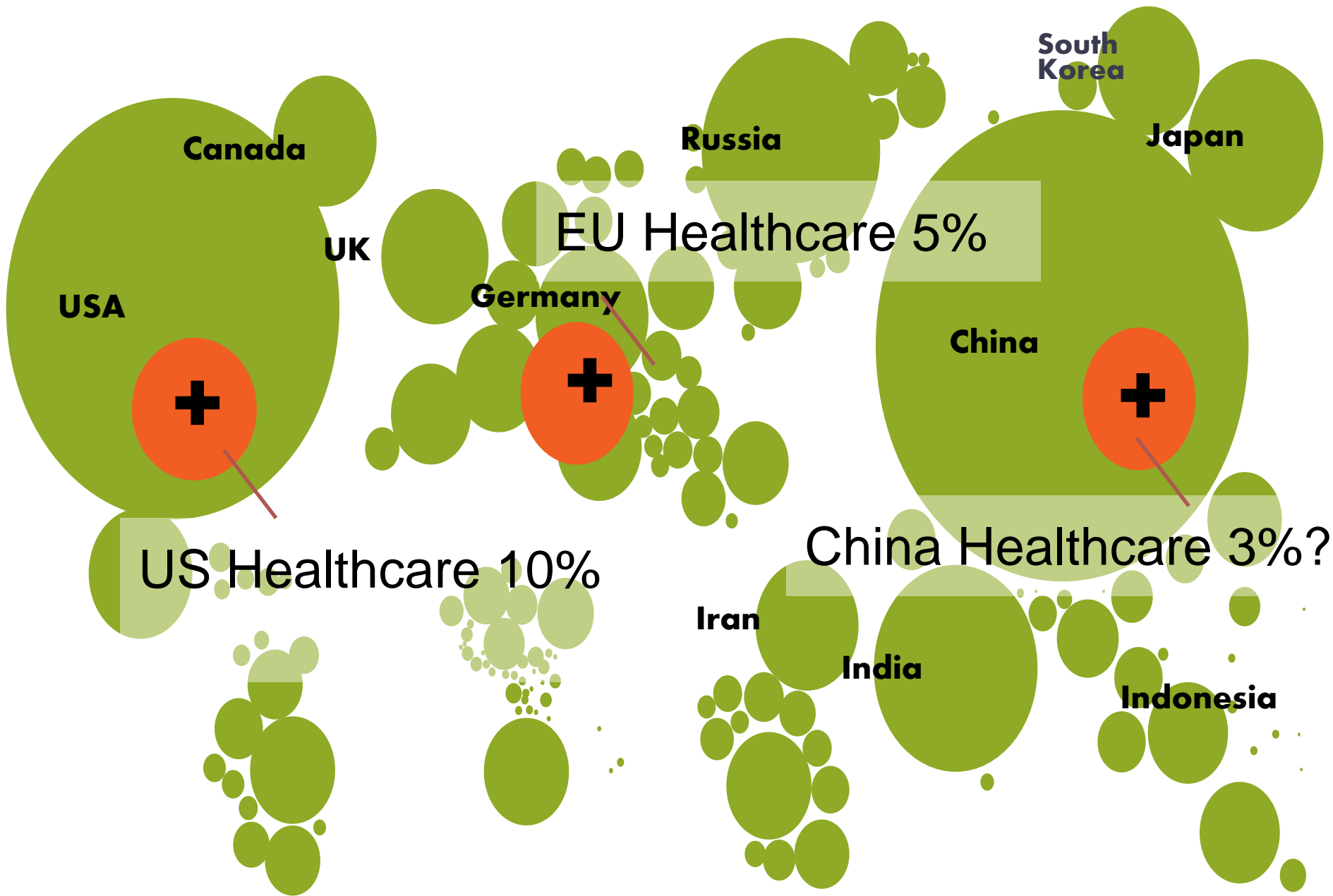
# CLIMATE SMART HEALTH and CARE in support of the SDGS

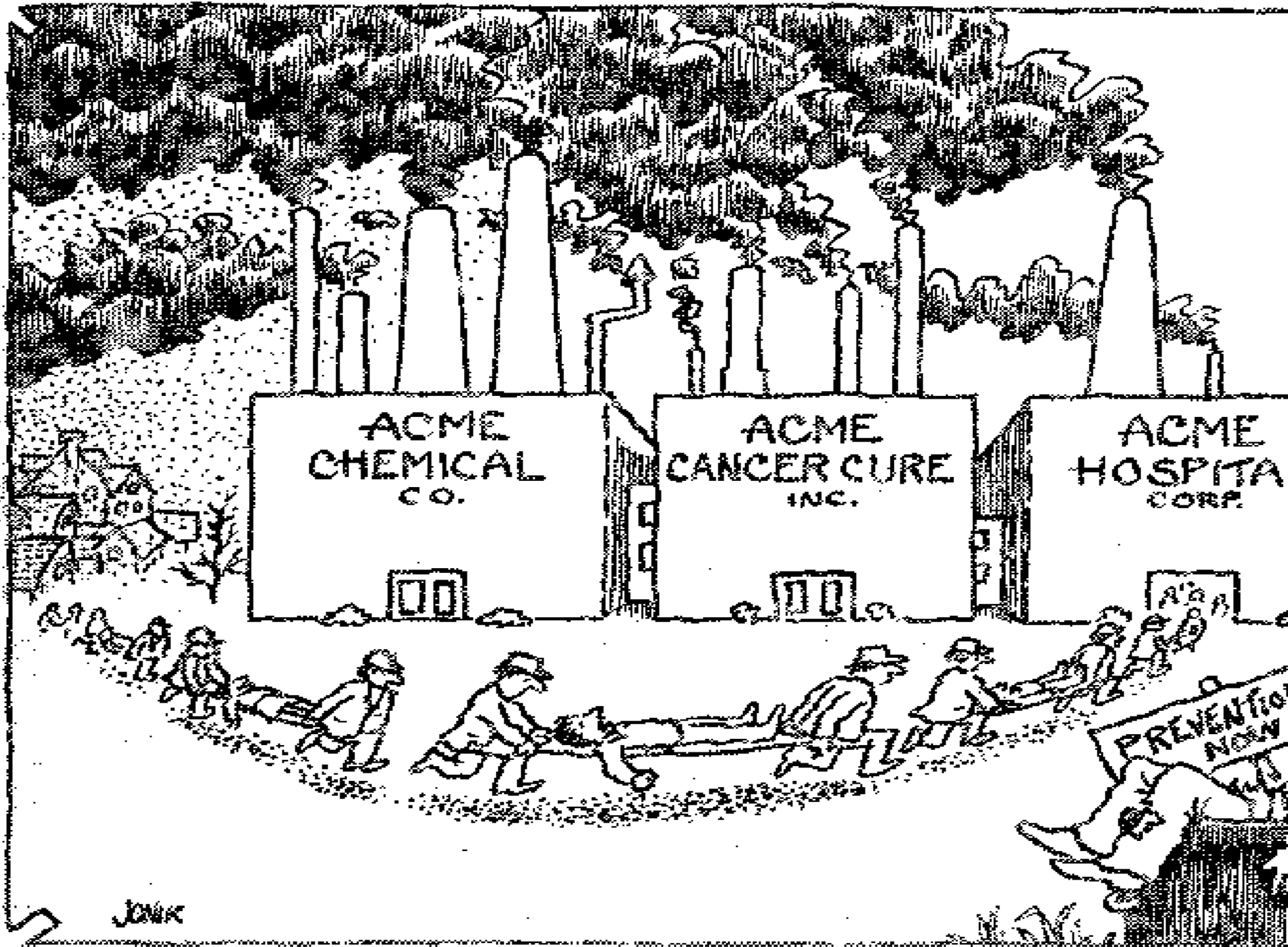




# CLIMATE CHANGE WILL REVERSE HEALTH AND DEVELOPMENT GAINS OF THE LAST 50 YEARS -*The Lancet* 2015







# Health Care--- from part of the problem to part of the solution





# What is Low Carbon Health Care?

## World Bank Definition



World Bank/NDF Guidance Paper  
(*forthcoming*)

“Low carbon health care

- Puts health systems on a climate smart development path, aligning health development and delivery with global climate goals...
- Strengthens health systems by increasing facilities’ resilience to extreme weather events and other disasters...
- Power(s) health care with low carbon solutions can enhance access to care, contributing to the goals of...universal health care for the poor and most vulnerable. ”





By moving toward low-carbon health systems, health care can:

- mitigate its own climate impact;
- become more climate resilient
- lead by example



# Second Global Conference **Health & Climate**

Paris 7–8 July 2016



Health systems can:

“Lead by example, advancing models of low-carbon health care that improve access to health care services, reduce occupational and environmental health risks and save energy costs across high, middle and low-income settings.”

# Health Systems Can Lead by Example by Investing in Green, Low Carbon, Resilient Health Care





# Low Carbon Health Care as a Solution in all Countries

- Increases access to care in low energy and low income settings
- Reduces health care's carbon footprint
  - In the care it provides
  - Along the supply chain
  - In the disposal of waste
- Saves money
- Prepares health systems to become more resilient and adapt to climate change
- Positions health systems as leaders in responding to climate change



World Bank/NDF Guidance Paper  
(forthcoming)



# What does it mean?

- Cleaner knows that products are green and clean
- Nurse knows that care is kind to patient and to the environment
- Doctor knows that prescription is good for health of patient and planet
- Hospital inspector knows that green standards are part of the quality of the service
- Educator knows it is a core part of the curriculum
- CEO and Medical Director know sustainability is a core component of quality



# Low Carbon Health Care

## *7 Key Elements*

*World Bank/NDF Guidance Paper (forthcoming)*



1. **Overall system design** for coordinated care, emphasis on local providers, and driven by public health needs.
2. **Building design and construction** based on low carbon approaches.
3. Investment in **renewable energy** and **energy efficiency**.
4. Waste minimization and sustainable health care **waste management**.
5. Sustainable **transport** and **water** consumption policies.
6. Low carbon **procurement** policies for pharmaceuticals, medical devices, food and other products.
7. **Resilience** strategies to withstand extreme weather events.



# the 2020 Challenge

The Challenge is based on the Lancet's three pillars:

- **Mitigation** – Reducing health care's own carbon footprint and deploying low carbon strategies.
- **Resilience** – Preparing for the impacts of extreme weather and the shifting burden of disease.
- **Leadership** – Educating staff and the public while promoting policies to protect public health from climate change.



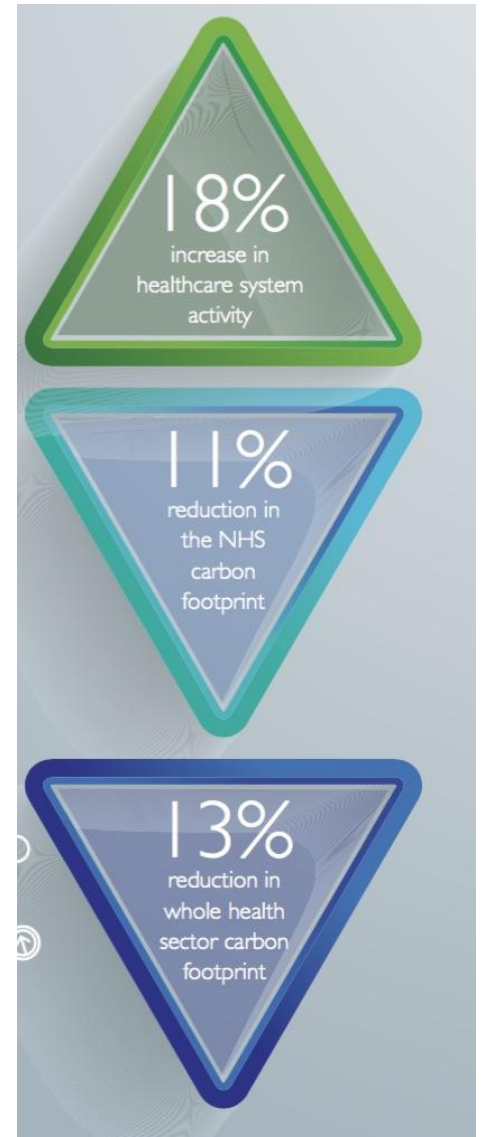
# Green, Low Carbon Health Care – System Wide

Footprint: 18 million tons of CO2 per year

26% of public sector emissions

**Target:** CO2 Reduction

- 34% by 2020
- 80% by 2050
- Carbon emissions reduction
  - Achieved reductions of emissions from energy sources by 39%- equivalent to 3.8 million metric tons of CO2 since 1990
  - Comprehensive tracking of emissions
  - Global leader in analyzing full carbon impact of health
- Leadership
  - Organizational strategy and planning built directly with national government
  - Sustainable Development Strategy identifies policy and actions at local, regional and national level.
  - Regional leads promote opportunities through legislation, policies, and actions





# Kaiser Permanente's 2025 Environmental Stewardship Goals:

## Raising the Bar on Environmental Responsibility



### CLIMATE ACTION

Become “carbon net positive” by buying enough clean energy and carbon offsets to remove more greenhouse gases from the atmosphere than we emit.



### SUSTAINABLE FOOD

Buy all of our food locally or from farms and producers that use sustainable practices, including using antibiotics responsibly.



### WASTE REDUCTION

Recycle, reuse or compost 100% of our non-hazardous waste.



### WATER CONSERVATION

Reduce the amount of water we use by 25% per square foot of buildings.



### SAFER PRODUCTS

Increase our purchase of products and materials meeting environmental standards to 50%.



### SUSTAINING SUSTAINABILITY

Meet international standards for environmental management at all of our hospitals.



### COLLABORATION

Pursue new collaborations to reduce environmental risks to foodsheds, watersheds and air basins supplying our communities.



# Low Carbon Health Care - Building Design and Construction

## Butaro District Hospital, Rwanda

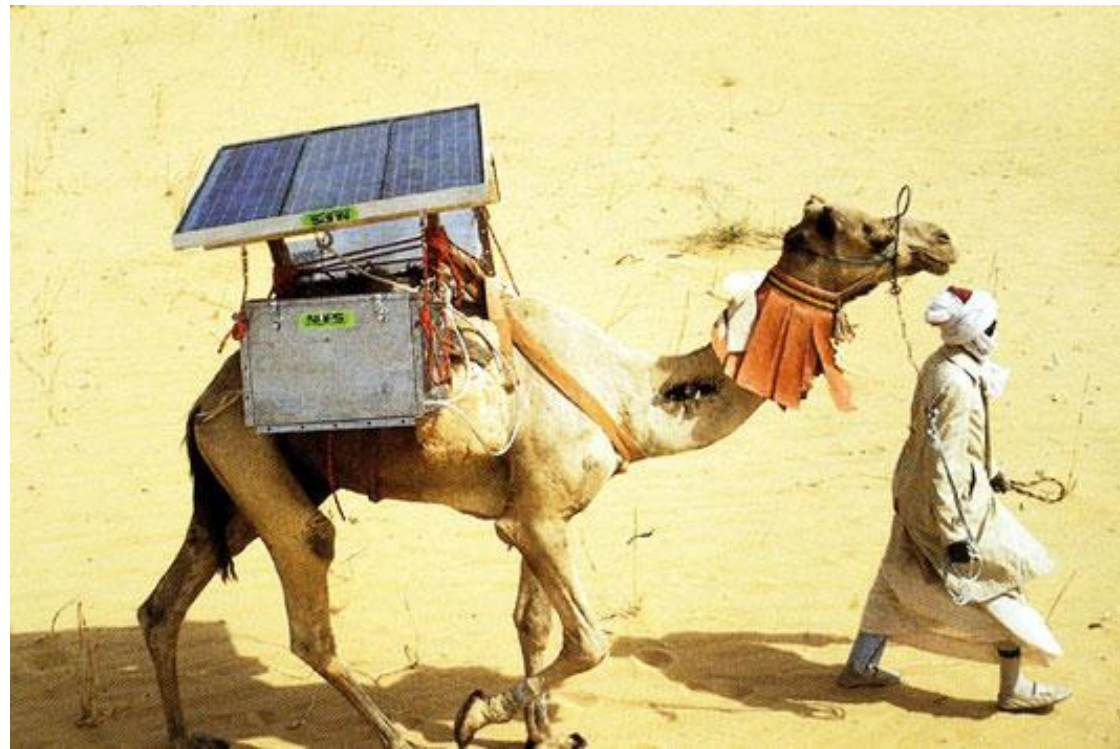
- Hospital construction used local materials and 100% local labor.
- Reduced energy consumption by using narrow floor plates, natural daylight and natural ventilation, along with high-volume, low-speed fans and germicidal UV lights to provide energy efficient ventilation while controlling the transmission of airborne diseases.
- Rainwater harvested for flushing toilets and landscape irrigation



# Low Carbon Health Care – Renewable Energy

## Solar Refrigeration

- About a dozen types of solar refrigerators for vaccine and blood storage are pre-qualified by WHO.
- Some can maintain the cold chain for a week or more without any electricity.
- Surplus electricity from the refrigeration system is often generated and tapped for other health facility loads.





# Low Carbon Health Care - Renewable Energy

- Uganda: 15% of hospitals use solar to complement grid electricity access.
- Sierra Leone, 36% of health facilities and 43% of hospitals use solar in combination with other sources.
- Several bilateral and multilateral aid initiatives support solar clinics.

Source: WHO/World Bank





# Low Carbon Health Care - Resilience

## Georgetown Hospital, St Vincent and the Grenadines

- Strengthened roof to withstand Hurricanes and volcanic ash
- Solar Panels to generate electricity
- Reduced energy consumption by over 60%
- Water storage system
- Natural lighting
- Part of PAHO Smart Hospitals Initiative



Georgetown Hospital (Photo: stlucianewsonline.com)

# Low Carbon Health Care and Resilience





# Low Carbon Health Care *Recommendations*



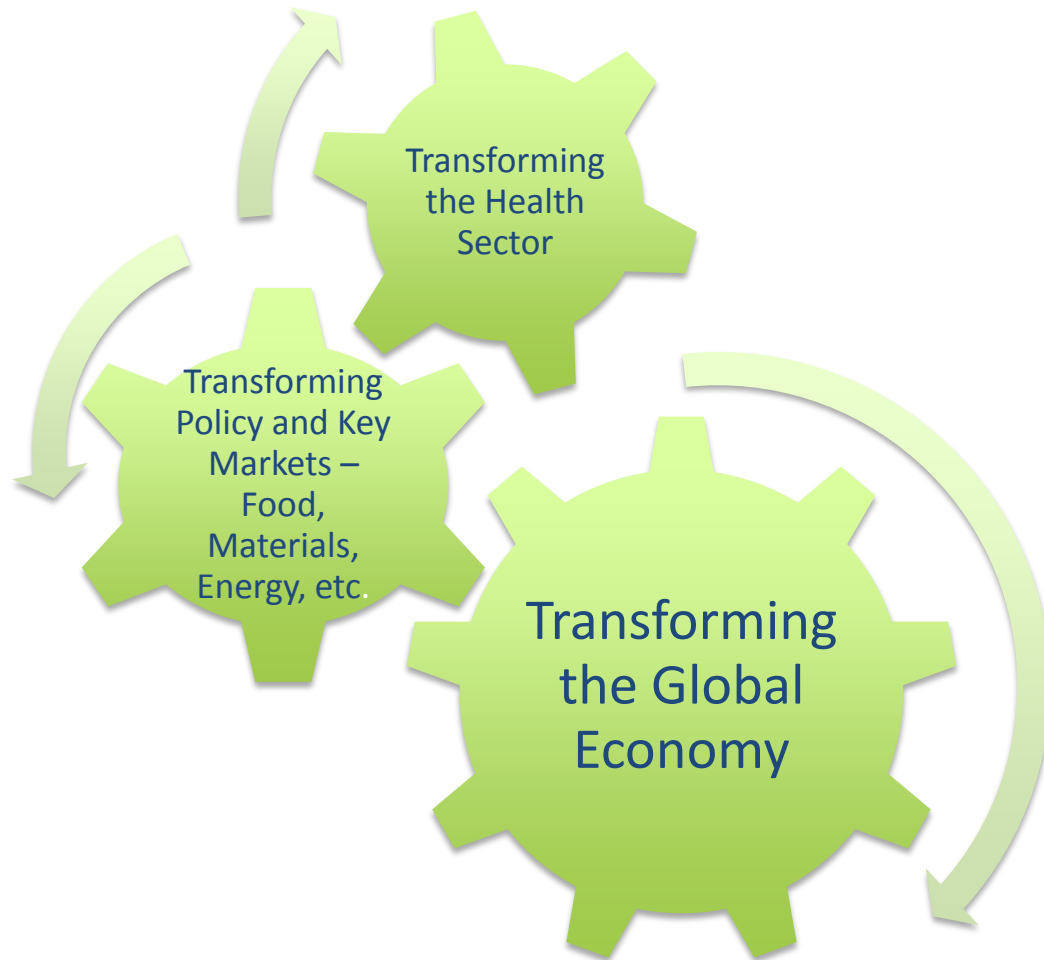
World Bank/NDF Guidance Paper (*draft*)

**Integrate low-carbon health care into strategies and policies, thereby influencing the path of health care development in low and middle income countries**

- Actively encourage the health sector to adopt key elements of low carbon health care.
- Integrate low carbon health care as central to strategies for universal health care coverage.
- Provide a blueprint for low cost health promoting systems that: reduce the burden of disease, adapt to new demands of efficiency and quality, mitigate greenhouse gas emissions and local pollution, and adapt to a changing climate.
- Encourage the integration of low carbon emphasis to planning, investment, implementation, monitoring and evaluation.



# Change in Healthcare Catalyzes Broader Change





# GGHH Programs and Benefits



[Learn](#) about our 10 goal framework



[Protect](#) public health from climate change



A data center that helps your institution measure its footprint and track progress. *Coming soon!*



An [online global collaboration platform](#)



[Online education](#) to learn about sustainable health



[Guidance documents](#) for sustainable health care action

*[www.greenhospitals.net](http://www.greenhospitals.net)*