Perspectives on Carbon Reductions: Climate Change and International Health care

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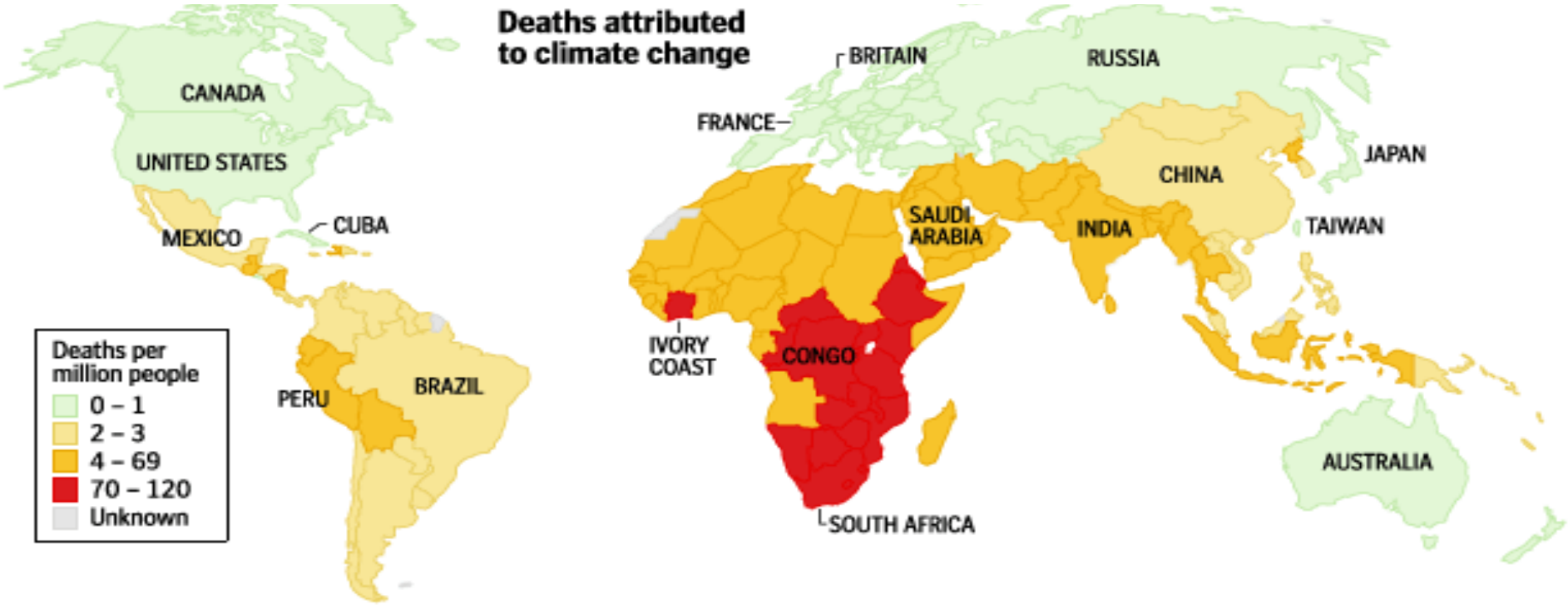
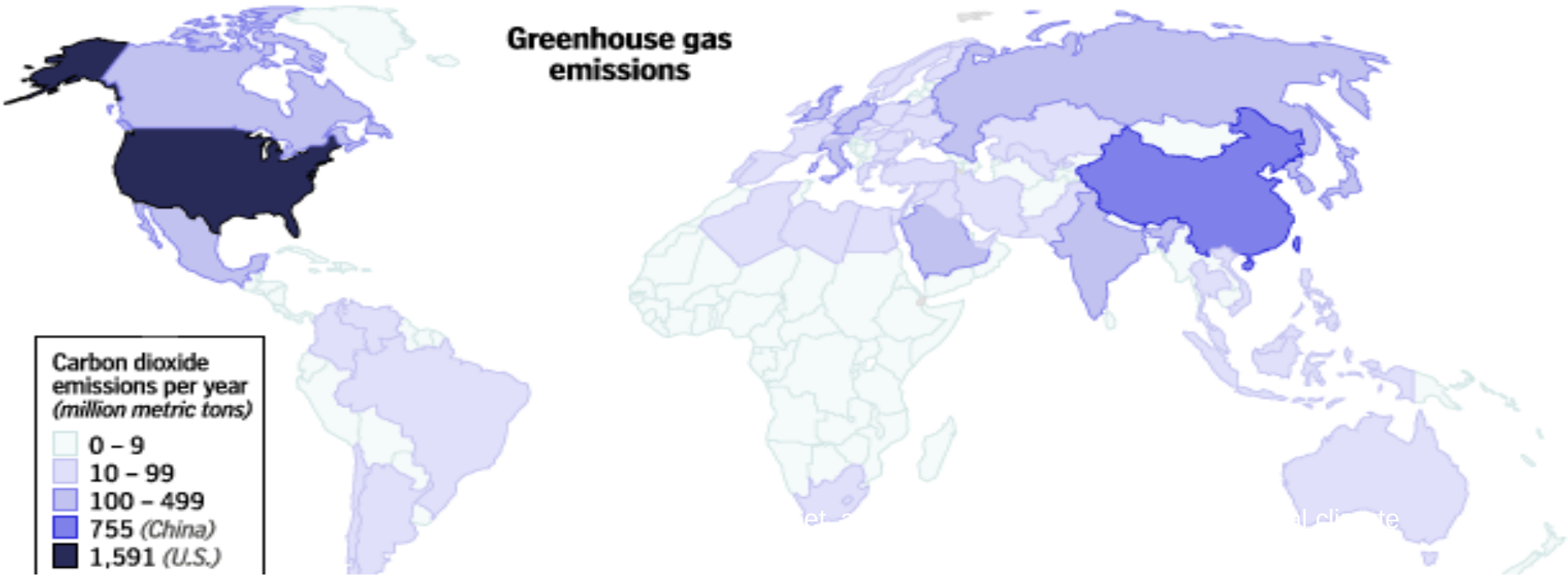
Introduction

- **Health Care Without Harm:** an international coalition of 443 organizations in 52 countries working to transform the health care sector so it is no longer a source of harm to people and the environment. Website: www.noharm.org
- **Issues:** Alternatives to medical waste incineration, mercury, PVC in the health care sector. Green buildings. Climate change. And more.
- **Health and Environment Alliance:** aims to raise awareness of how environmental protection improves health. It brings together more than 60 organizations in over 20 countries at the European level. Website: www.env-health.org
- **Issues:** environment and health, mercury, chemicals (REACH), pesticides. Public Participation. Climate Change. And more.


Deaths attributed to climate change
CANADA
UNITED STATES
MEXICO
CUBA
PERU
BRAZIL
BRITAIN
RUSSIA
FRANCE
CHINA
JAPAN
SAUDI ARABIA
INDIA
TAIWAN
IVORY COAST
CONGO
SOUTH AFRICA
AUSTRALIA
Deaths per million people
0 – 1
2 – 3
4 – 69
70 – 120
Unknown


Greenhouse gas emissions
Carbon dioxide emissions per year (million metric tons)
0 – 9
10 – 99
100 – 499
755 (China)
1,591 (U.S.)

Call for URGENT action

- IPCC Report, November 2007
- WHO Executive Board, January 2009: endorsed far-reaching work plan on climate change and health, approved by WHA in May 2009 – actions on reducing health care sector's climate footprint
- International meeting of scientists, March 2009: need for 'rapid, sustained and effective mitigation… to avoid 'dangerous climate change''
- WHO European region ministers of health and Environment commitment, April 2009: 'protecting health, promoting health equity, heath security and healthy environments in a changing climate'
- We are part of the solution. So…act now!

Healthcare can lead

Why?

- Human interdependency with nature
- Healthcare commitment: ‘first do no harm’
- Healthcare significant greenhouse gas emitters and energy users: potential part of the solution
- Health benefits of carbon emission reductions:

e.g. raising the EU target on carbon emission reductions to 30% (from the current EU target of a 20% cut) would prevent 5,300 cases of chronic bronchitis and 2,800 fewer hospitalisations annually by 2020.

HEALTHY HOSPITALS HEALTHY PLANET HEALTHY PEOPLE

Addressing climate change in health care settings

World Health Organization

Health Care Without Harm

Discussion Draft

Seven elements of a climate-friendly hospital

1 **Energy efficiency**
Reduce hospital energy consumption and costs through efficiency and conservation measures.

2 **Green building design**
Build hospitals that are responsive to local climate conditions and optimized for reduced energy and resource demands.

3 **Alternative energy generation**
Produce and/or consume clean, renewable energy onsite to ensure reliable and resilient operation.

4 **Transportation**
Use alternative fuels for hospital vehicle fleets; encourage walking and cycling to the facility; promote staff, patient and community use of public transport; site health-care buildings to minimize the need for staff and patient transportation.

5 **Food**
Provide sustainably grown local food for staff and patients.

6 **Waste**
Reduce, re-use, recycle, compost; employ alternatives to waste incineration.

7 **Water**
Conserve water; avoid bottled water when safe alternatives exist.

Examples of actions I

Energy efficiency:

- **Brazil**: through simple energy saving measures, 101 hospitals in Sao Paulo cut energy use by 25%, 2003-2004
- **India**: Sir Jamshedji Jeejeebhoy Hospital - awareness campaign and simple measures to reduce energy use. Result, total energy saving of 812 000kWh and cost saving of $ 90 000 in 2002-2004

Examples of actions II

Alternative energy generation

- **Rwanda and Tanzania:** several Health clinics use solar energy to provide 90% of the clinics' energy. This provides a reliable, off-grid, low-cost and environmentally sustainable source of power – improving primary health care in these localities

(shown – off grid electricity with solar panels)

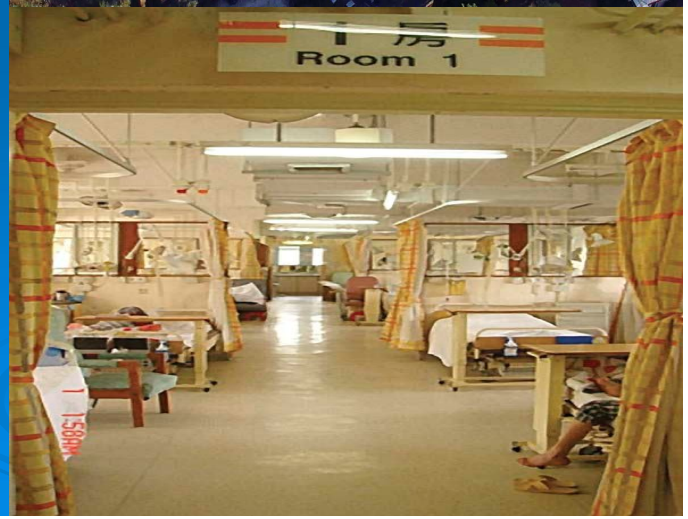
Alternative energy:

USA, York Hospital in Maine purchases 90% renewable power from in-state sources.

The hospital's green power purchases helped it reduce its carbon emissions by 24% between 2000 and 2006; the hospital's green programs save more than $100,000 per year.

Examples of actions II

- **Green building design:**
  - **Italy:** Meyer Children's Hospital, construction and design e.g. skylights, energy-efficient hybrid ventilation system, etc, consumes 35% less energy for heating and cooling and 36% less electricity than standard hospital
  - **Singapore:** Changi General Hospital uses combination of design features - reduction in energy and water costs, saves US$800 000 per year



Examples of actions III

New York-Presbyterian Hospital has conserved energy by:

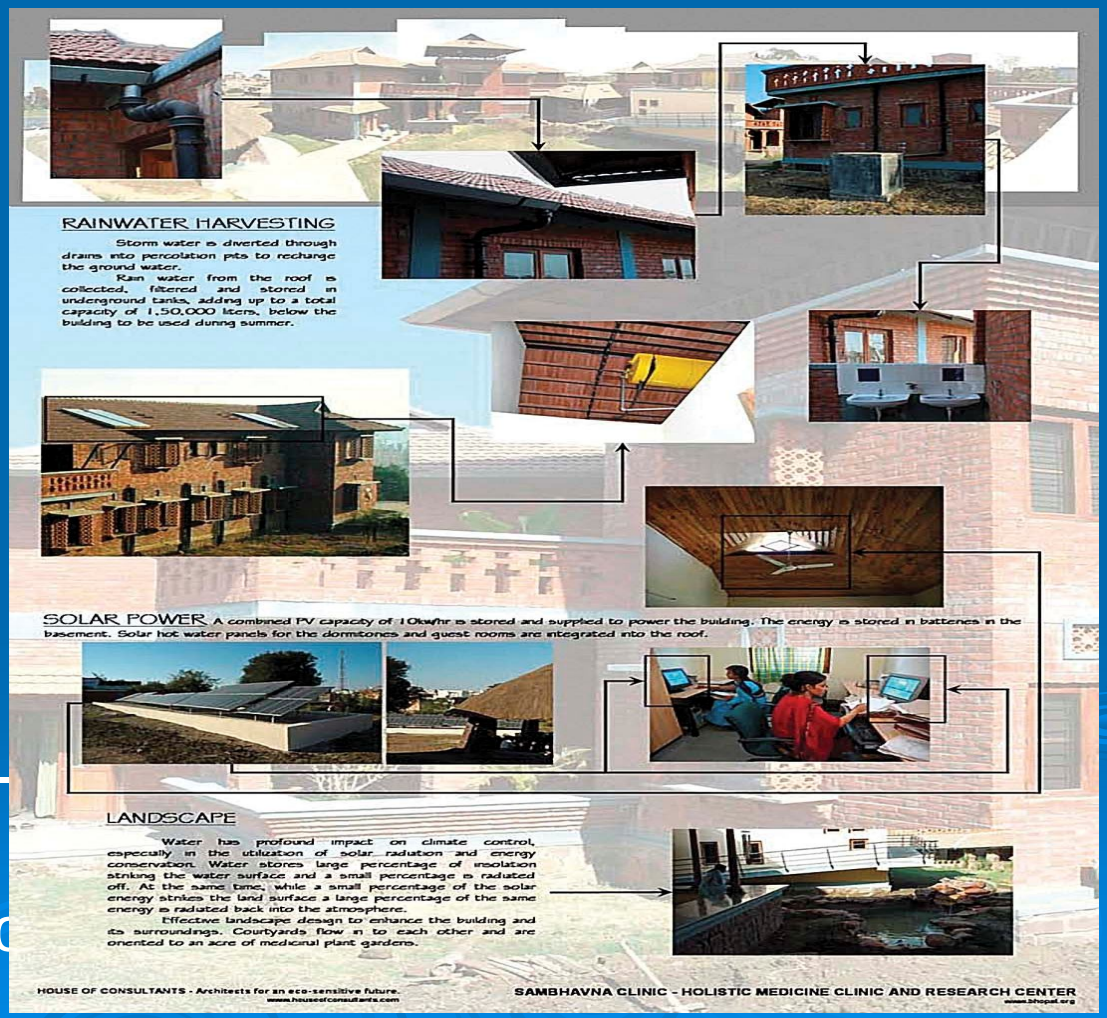
- Comprehensively retrofitting its HVA system, lighting, building control system, and central plant;
- Educating staff about energy conservation strategies;
- Pursuing LEED certification for several buildings.
- In two years, the hospital system had reduced building energy use by 11%, saving $1.77 million per year.

Examples of actions IV

Transportation:

- **UK: Addenbrook hospital Cambridge**, with interest-free bicycle loans and bus passes reduced cars on hospital campus by 16% and staff car use by 22%
- **Sweden:** one of Stockholm County Council's ambulance operators - « eco-driving », reduced fuel use by 10% among ambulances and 50% less insurance claims (after 18 months trial) at no increased risk to patients, now considering biofuels use…

Examples of actions V



Water: India, Bhopal Sambhavna Trust Clinic - rainwater harvesting, recycled water for irrigatio solar water heaters, etc

Please join us!

- WHO-HCWH-HEAL creating Climate Friendly Network: starting consultations and hoping to form Platform which will be basis for global network
  - A knowledge-based learning network; community of practice on climate mitigation
- We invite you to be part of our Climate Friendly healthcare network: please write to pendo.maro@hcwh.org
- We welcome your feedback on our discussion draft report and on forthcoming Platform discussions: http://www.noharm.org/details.cfm?ID=2199&type=document
- We ask you to support our efforts to put health sector at the centre of climate change discussions in Copenhagen: http://www.env-health.org/a/3351
- Sign up to our climate and health news server: email me

Thank you