

Environmental Stewardship Webinar



Climate Change: An Issue of Concern to the Church, Pope Francis and Catholic Health Care

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Opening reflection ...

As we embark on this season of repentance, we pause to reflect on some insights shared by the ecumenical group Operation Noah:

Continuing to pollute the atmosphere when we know the dangers, goes against what we know of God's ways and God's will. We are failing to love not only the earth, but our neighbors and ourselves, who are made in God's image. God grieves over the destruction of creation and so should we. Repentance means finding creative, constructive and immediate ways of addressing the danger. It happens when God's Spirit enables a change of mind and change of heart, prompting a turn from past wrong and a decision to change direction.

Today, reminded by our Ashes that we are all part of Creation, we pray that the Spirit would transform our minds and hearts, and so help us to better care for all God's creation—especially the community of human persons and its most vulnerable members.



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Our presenters ...

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Catholic Teaching

Natural Ecology: The whole of the natural world, which includes humanity and places us at the apex of creation.



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Catholic Teaching

Natural Ecology: The whole of the natural world, which includes humanity and places us at the apex of creation.

Human Ecology: The ways that humans interact with non-human nature.

- How we treat the natural world
- How we are impacted by both the natural world and our treatment of it



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Catholic Teaching

“The LORD God then took the man and settled him in the garden of Eden, to cultivate and care for it” (Genesis 2:15).

- **Natural Ecology:** Creation cultivation that resists domination/exploitation



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Catholic Teaching

“The LORD God then took the man and settled him in the garden of Eden, to cultivate and care for it” (Genesis 2:15).

- **Human Ecology:** Creation care that protects the church’s social commitments
 - Protection of human life and dignity, especially of the poor and vulnerable
 - Promotion of the common good through the universal destination of goods
 - Solidarity, both spatial and temporal

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Catholic Teaching



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Catholic Teaching

“The ecological crisis is a moral issue” (Pope John Paul II,
1990 *World Day of Peace Message*, no. 15, emphasis in original).

Charity: “Response to immediate needs
and specific situations” (Pope Benedict XVI,
Deus Caritas Est, no. 31).



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Catholic Teaching

“The ecological crisis is a moral issue” (Pope John Paul II, 1990 *World Day of Peace Message*, no. 15, emphasis in original).

Charity: “Response to immediate needs and specific situations” (Pope Benedict XVI, *Deus Caritas Est*, no. 31).

Justice: Attention to “the structural dimension of problems and their respective solutions” (*Compendium of the Social Doctrine of the Church*, no. 201).



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Pope Francis' Ecological Vision

1. Goodness of all creation
2. Humanity's unique place in creation
3. Connection between creation care and human flourishing
4. Connection between creation care and peace
5. Humanity's stewardship responsibility



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1. Goodness of All Creation



“The first chapter of Genesis, at the very beginning of the Bible, shows us that God delights of His creation, by repeatedly emphasizing the beauty and goodness of all things. At the end of each day, it is written: ‘God saw that it was good.’”

May 21, 2014

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1. Goodness of All Creation



“The first chapter of Genesis, at the very beginning of the Bible, shows us that God delights of His creation, by repeatedly emphasizing the beauty and goodness of all things. At the end of each day, it is written: ‘God saw that it was good.’”

“If God sees that Creation is something good and beautiful, we too must have this attitude, we must see that Creation is something good and beautiful.”

May 21, 2014

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2. Humanity's Unique Place in Creation

All persons "are God's handiwork, his creation."

Evangelii Gaudium, no. 247



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2. Humanity's Unique Place in Creation

All persons "are God's handiwork, his creation."

Evangelii Gaudium, no. 247



"In the eyes of God we [humans] are the most beautiful thing, the greatest, the best of creation... The gift of knowledge sets us in profound harmony with the Creator and allows us to participate in the clarity of his vision and his judgment."

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3. Creation Care and Human Flourishing

“Thanks to our bodies, God has joined us so closely to the world around us that we can feel the desertification of the soil almost as a physical ailment, and the extinction of a species as a painful disfigurement” .”



Evangelii Gaudium, no. 215

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3. Creation Care and Human Flourishing

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Evangelii Gaudium, no. 215

“The “many wounds [that] are inflicted upon humanity” due to “our failures in love and respect towards...the whole of creation.”

March 22, 2013

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4. Creation Care and Peace

“Fraternity helps to preserve and cultivate nature”
(emphasis in original).



2014 *World Day of Peace*, no. 9

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4. Creation Care and Peace

“Fraternity helps to preserve and cultivate nature”
(emphasis in original).



2014 *World Day of Peace*, no. 9

“Peace to the whole world, torn apart by violence linked to drug trafficking and by the iniquitous exploitation of natural resources! Peace to this our Earth!”

2013 *Urbi et Orbi* Easter Message

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5. Human Stewardship of Creation

“The Christian view of creation includes a positive judgment about the legitimacy of interventions on nature...



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5. Human Stewardship of Creation

“The Christian view of creation includes a positive judgment about the legitimacy of interventions on nature ...



“if these [interventions] are meant to be beneficial and are performed responsibly, that is to say, by acknowledging the “grammar” inscribed in nature and by wisely using resources for the benefit of all, with respect for the beauty, finality and usefulness of every living being and its place in the ecosystem.”

2014 World Day of Peace Message, no. 9

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5. Human Stewardship of Creation



“I would like to remind everyone of that necessary *universal destination of all goods* which is one of the fundamental principles of the Church’s social teaching” (emphasis in original).

2014 *World Day of Peace Message*, no. 9

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5. Human Stewardship of Creation



“I would like to remind everyone of that necessary *universal destination of all goods* which is one of the fundamental principles of the Church’s social teaching” (emphasis in original).

2014 *World Day of Peace Message*, no. 9

“Creation is not a property, which we can rule over at will; or, even less, is the property of only a few.”

May 21, 2014

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5. Human Stewardship of Creation



The universal destination of all goods is “the essential condition for facilitating an effective and fair access to those essential and primary goods which every person needs and to which he or she has a right.”

2014 World Day of Peace Message, no. 9

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Charity



- “Our personal sins: our failures in love and respect towards God, towards our neighbour and towards the whole of creation.”

2013 Palm Sunday Homily

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Charity



- “Our personal sins: our failures in love and respect towards God, towards our neighbour and towards the whole of creation.”

2013 Palm Sunday Homily

- “Become [an] agent of God’s mercy, [a] channel through which God can water the earth, [and] protect all creation.”

2013 *Urbi et Orbi* Easter Message

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Justice



- “I would like to make an appeal to those in possession of greater resources, to public authorities and to all people of good will who are working for social justice: never tire of working for a more just world, marked by greater solidarity! No one can remain insensitive to the inequalities that persist in the world!”

2013 World Youth Day

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Justice



- “Confronting seriously the problem of global warming requires ... strengthening, deepening and consolidating the political process on a global level” in order to alter “the current dominant models of consumption and production.”

Message via Vatican Secretary of State to 2014 U.N. Climate Change Summit

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Conclusion



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PRAY and reflect on the duty to care for God's Creation and protect the poor and vulnerable.

LEARN about and educate others on the causes and moral dimensions of climate change.

ASSESS how we-as individuals and in our families, parishes and other affiliations- contribute to climate change by our own energy use, consumption, waste, etc.

ACT to change our choices and behaviors to reduce the ways we contribute to climate change.

ADVOCATE for Catholic principles and priorities in climate change discussions and decisions, especially as they impact those who are poor and vulnerable.

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Addressing the Problem: Catholic Health Care's Role



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Addressing the Problem: Catholic Health Care's Role

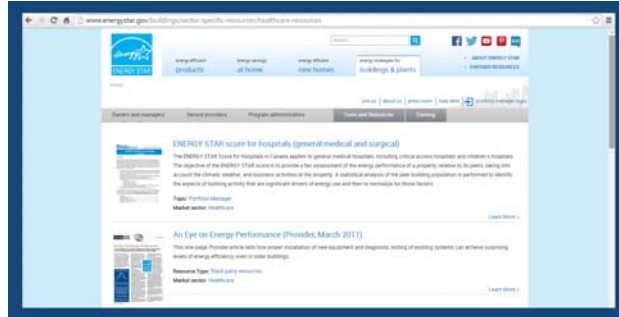


chausa.org/environment/overview

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Addressing the Problem: Catholic Health Care's Role



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Addressing the Problem: Catholic Health Care's Role



practicegreenhealth.org



noharm.org

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Addressing the Problem: Catholic Health Care's Role



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Addressing the Problem: Catholic Health Care's Role



Clean Power Plan

- December 1, 2014: Public comment period ends
- June 2015: EPA issues state-specific CO2 targets
- June 2016: States submit CO2 reduction plans
- 2030: CO2 emissions reduced 30% from 2005 levels

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Addressing the Problem: Catholic Health Care's Role



Clean Power Plan

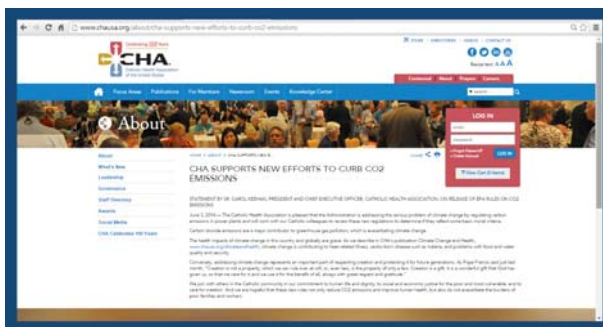
- Avoid 2,700 to 6,600 premature deaths and 140,000-150,000 asthma attacks in children by 2030
- “Climate and health benefits worth an estimated \$55 billion to \$93 billion per year in 2030.”
- \$7 in health benefits for every \$1 invested

<http://www2.epa.gov/carbon-pollution-standards/fact-sheet-clean-power-plan-benefits>

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Addressing the Problem: Catholic Health Care's Role



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Addressing the Problem: Catholic Health Care's Role



<http://goo.gl/TrQLDr>

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Addressing the Problem: Catholic Health Care's Role



<http://ignatiansolidarity.net/wp-content/uploads/2015/01/Guide-for-LTEs-and-Op-Eds-3.pdf>

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Addressing the Problem: Catholic Health Care's Role



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Climate Change as a Health and Social Problem

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Director, Mid-Atlantic Center for Children's Health and the Environment
White House Champion of Change for Climate Change and Public Health

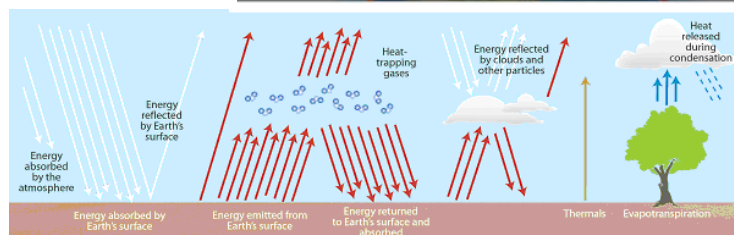
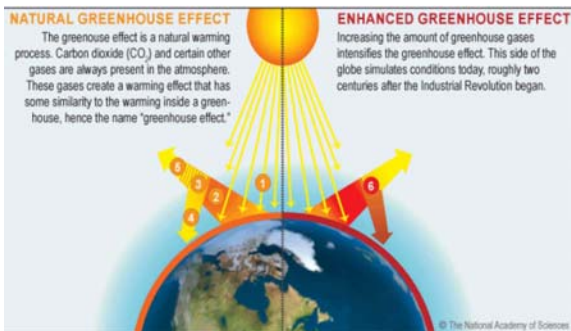


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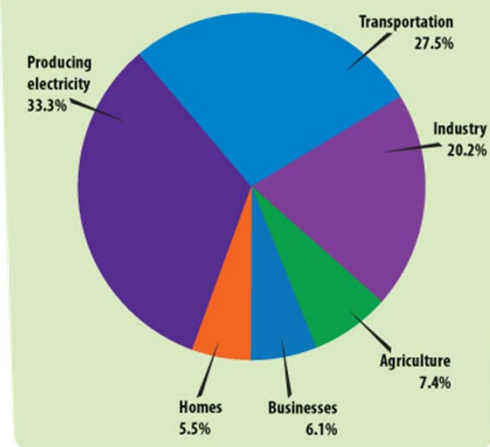
*Climate is what we expect,
weather is what we get*

Mark Twain





Sources of U.S. Greenhouse Gas Emissions (2009)
 (not including U.S. territories)



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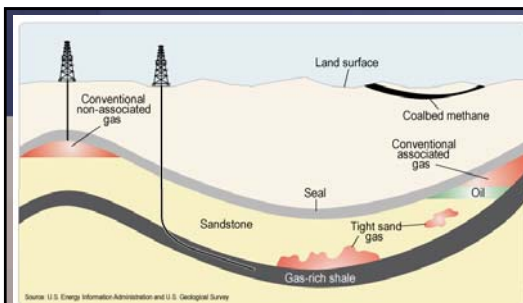
Carbon Dioxide

Where does it come from?

- Burning fossil fuels to produce electricity and heat buildings
- Burning gasoline and other fossil fuels to run vehicles
- Cutting down and burning trees or other vegetation
- Some industrial and manufacturing processes, like producing cement

How long does it stay in the atmosphere?

50 to thousands of years



Source: U.S. Energy Information Administration and U.S. Geological Survey

Methane

Where does it come from?

- Livestock. As they digest food and when manure decays
- Landfills. Trash breaks down and releases methane
- Producing and transporting natural gas.
- Cutting down and burning trees or other vegetation
- Mining coal. Can be released during mining

How long does it stay in the atmosphere?

12 years (over 20X more heat trapped than the same amount of carbon dioxide)





Nitrous Oxide

Where does it come from?

Farming practices that add nitrogen to the soil (fertilizer)
 Burning fossil fuels to run vehicles

Some industrial and manufacturing processes

How long does it stay in the atmosphere?

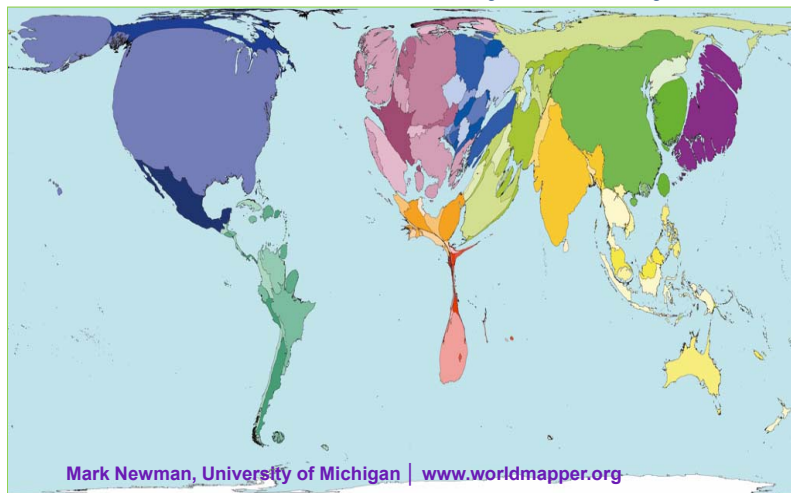
114 years; 298X more heat trapped than the same amount of carbon dioxide

Climate Connections



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Greenhouse Emissions by Country

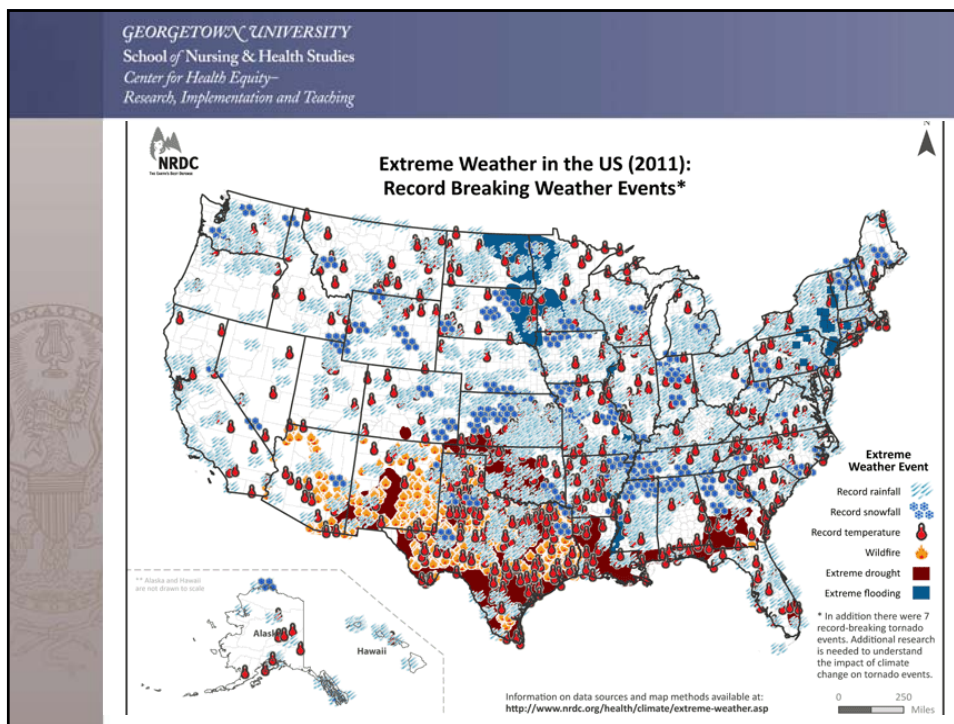


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Health Impacts of Climate Change



Data from: WHO 2004
Map from: Jonathan Patz, University of Wisconsin



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Human Health and Climate Change

- The Intergovernmental Panel on Climate Change (IPCC, 2007) predicts that extreme events will result in a variety of health events between now and 2100

UN.org



CLIMATE CHANGE
**REDUCING AND
MANAGING RISKS**

ipcc
INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

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Climate Change and Health:
IS THERE A ROLE FOR THE HEALTH CARE SECTOR?

by Laura Arahata, Ph.D., RN
Stephanie Chakrabarti, J.D., RN, PHUN, BC, FAAPRN
Brenda M. Hoot, M.S., RN



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Climate Solutions

Adaptation: initiatives & measures to reduce the vulnerability of natural & human systems against actual or expected climate change effects

Mitigation: Interventions to reduce emissions (or enhance sinks) of greenhouse gases

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Resource for Adaptation Efforts

Georgetown Climate Center:
Adaptation Clearinghouse

<http://www.georgetownclimate.org/adaptation/clearinghouse>



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www.climateandhealthcare.org/



Global Climate
and HEALTH
Resource Center



Connecting Health Care with Public & Environmental Health ~ Ted Schettler, MD, MPH

- To improve public and environmental health consequences consider:
 - Purchasing
 - Materials, toxicity, reduction, recycling
 - Waste management
 - Building design
 - Energy use
 - Water management
 - Transportation
 - Housekeeping and maintenance
 - Food systems
 - Grounds and landscaping

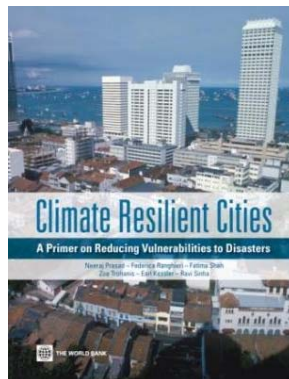


Climate Change Preparedness and Emergency Management

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Adaptation: Climate-Health Preparedness

- Identify Local Vulnerabilities
- Track Environmental Changes & Health Threats
- Build Resilient Communities
- Promote Education & Public Dialogue
- Systems think is necessary



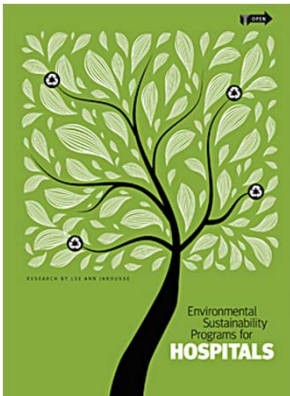
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<http://toolkit.climate.gov>



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Mitigation Strategies



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HEALTHY HOSPITALS, HEALTHY PLANET, HEALTHY PEOPLE

Elements of a climate-friendly hospital

- **Energy efficiency:** Reduce hospital energy consumption and costs through efficiency and conservation measures
- **Green building design:** Build hospitals that are responsive to local climate conditions and optimized for reduced energy and resource demands
- **Alternative energy generation:** Produce and/or consume clean, renewable energy onsite to ensure reliable and resilient operation
- **Food:** Provide sustainably grown local food for staff and patients

http://www.who.int/globalchange/publications/climatefootprint_report.pdf

HEALTHY HOSPITALS, HEALTHY PLANET, HEALTHY PEOPLE

- **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
- **Waste:** Reduce, re-use, recycle, compost; employ alternatives to waste incineration
- **Water:** Conserve water; avoid bottled water when safe alternatives exist

Energy Efficient Hospitals



- *Can save money
- *Help prevent greenhouse gas emissions
- *Improve the air quality of their communities
- *Support their commitment to public health

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Intergovernmental Panel on Climate Change


2013/2014 Report

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IPCC Report


- Most effective measures to reduce vulnerability in the near-term are programs that implement basic public health measures such as:
 - provision of clean water and sanitation,
 - secure essential health care including vaccination and child health services,
 - increase capacity for disaster preparedness and response, and
 - alleviate poverty [very high confidence].

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HEALTH BENEFITS OF THE CLEAN AIR ACT

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How the Clean Air Act has Improved Health

- ◆ In 2010, approx. \$1.3 trillion (9% of GDP) was gained in public health and environmental health benefits for a cost of \$50 billion (.4% of GDP) EPA, 2011
- ◆ Reduced pollution led to:
 - ◆ less illness and less days lost to work, school,
 - ◆ less disability and deaths,
 - ◆ reduced hospitalizations and other related medical costs and
 - ◆ increased the size of the economy Goodstein et al., 2010

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Thank you!

