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Climate & Health News

Newsletter of the JHU-UPF Public Policy Center Climate Change Working Group



PUBLIC POLICY CENTER



OCTOBER 2019

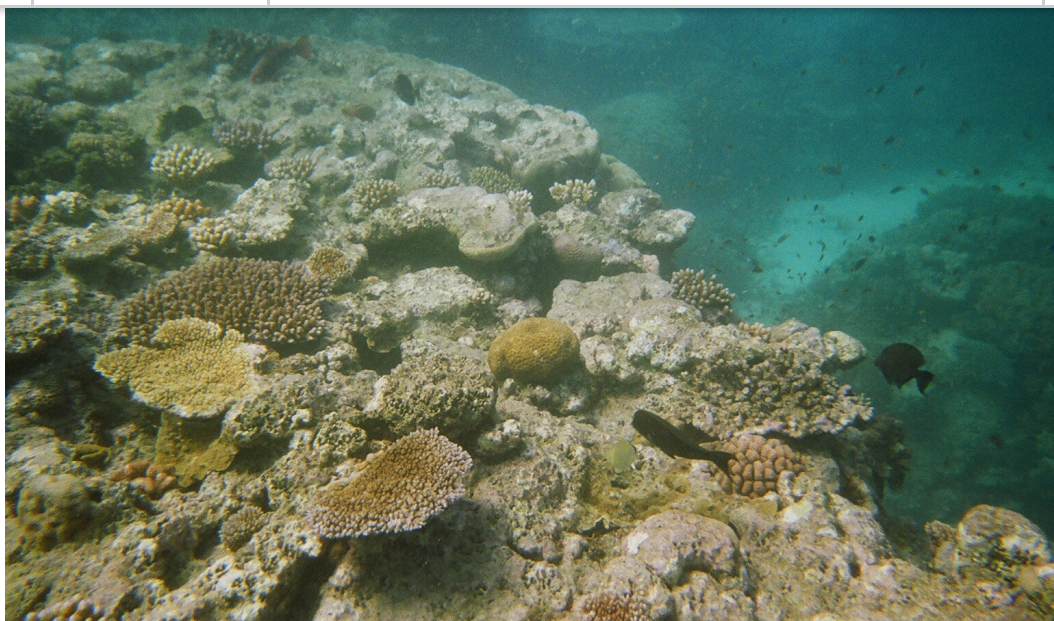
A news and science roundup organized by the five themes of *The Lancet Countdown on Health and Climate*: health impacts; adaptation; mitigation; economics and finance; and communication and politics.

Health Impacts

News

[The toll of climate change on the world's water](#)

A major new [IPCC Special Report on the Ocean and Cryosphere](#) concludes the world's oceans have borne the brunt of climate warming, absorbing 90% of the heat trapped in the atmosphere by excess greenhouse gases since the 1970s, and 20-30% of the carbon dioxide, contributing to an increasing pace of polar ice melt and sea level rise. – *National Geographic*



The Great Barrier Reef, which has been impacted by human use, such as overfishing and tourism. Other environmental pressures to the reef and its ecosystem include water quality from runoff, climate change accompanied by mass coral bleaching, and cyclic outbreaks of the crown-of-thorns starfish. Photo: Jorge Lascar

Read also:

- [Under the radar: Health impacts of climate change we are feeling now](#) – *Scientific American*
 - [Humans vs mosquitos: At the frontlines of a public health war](#) – *Public Integrity*
 - [French Health Minister announces 1,500 heatwave deaths this summer](#) – *The Guardian*
 - [Harare: The city runs dry - two million people without water](#) – *Yale e360*
 - [A million Indonesians with respiratory problems after wildfires](#) – *New York Times*
 - [Lack of clean water brings disease to Bahamas following Hurricane Dorian](#) – *Circle of Blue*
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Science

[Aerosols: New modeling finds both climate and air-quality benefits of fossil fuel phase out](#)

thereby masking some of the warming effect of GHGs. Previous research has suggested that reducing aerosols with fossil fuel phase-out would contribute to global warming. In this study researchers find that when modeling realistic timing and magnitude of fossil fuel reductions, warming is not increased. These results differ from much recent research on the topic, and suggest that even an aggressive transition to clean energy provides benefits for both climate mitigation and air quality goals in the near and long term.

– Shindell & Smith, *Nature*



There is an urgency for global transitions to clean energy. The Nesjavellir Geothermal Power Plant in Þingvellir, Iceland.

Photo: Gretar Ívarsson, geologist at Nesjavellir

Read also:

- [Flood damaged homes and mental health in UK](#) – Graham et al., *Int J Environ Res Public Health*
- [Agriculture land-use exacerbates infectious disease risk in South Asia](#) – Shah et al., *Nat Commun*
- [Review: Landslides and human health](#) – Haque et al., *Sci Total Environ*
- [Review: Global distribution of dengue fever](#) – Messina et al. *Nat Microbiol*
- [Review: Global change and mosquito-borne disease](#) – Franklinos et al., *Lancet Infect Dis*
- [NB: Call for climate and health articles](#) – *JAMA Network Open* – deadline Mar 1, 2020

News

Cities can cut emissions by 90% by 2050

The new report [Climate Emergency: Urban Opportunity](#) by the Coalition of Urban Transitions outlines the enormous social and economic benefits of creating compact, connected clean cities with net zero emissions. Using existing technologies cities can reduce GHG emissions from energy, residential and commercial buildings, transport, waste and materials, and support local climate action and resilience initiatives. – *National Geographic*



Pollution blurs the view of Pyramids in Cairo. Photo: Max Pixels

Read also:

- [What type of 'smart city' will be most resilient to climate change hazards?](#) – *Forbes*
- [London: Heating homes with heat from the Underground](#) – *FastCompany*
- ['Climigration:' More communities have to no choice but to move](#) – *The Conversation*
- [How to turn down the temperature on urban heat islands](#) – *Yale e360*
- [New York: New island park is a model of climate resilient urban design](#) – *FastCompany*
- [Groundwater use is a major factor in most major cities' coastal subsidence](#) – *Circle of Blue*
- [Baltimore: Heatwave Code Red alert](#) – *National Public Radio*

Review: Integrating public health into climate change

Researchers document the evolution of public health's role in climate action and find promising response in assessment (monitoring climate hazards, diagnosing health status, assessing vulnerability); mixed results in policy development (mobilizing partnerships, mitigation and adaptation activities); and relatively weak performance in assurance (communication, workforce development and evaluation). – Fox et al., *Int J Environ Res Public Health*

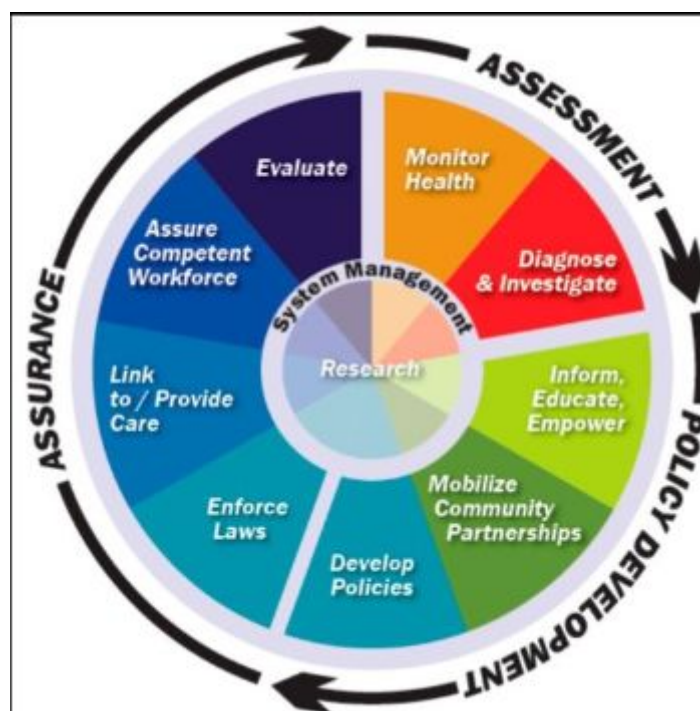


Image 1: The core functions and essential services (CFES) model for implementing policies relating to health and climate change.

Read also:

- [Heat health action plans in Europe](#) – Martinez et al., *Environ Res*
- [Barcelona: Urban adaptation – the Superblock model](#) – Mueller et al., *Environ Int*
- [Development of a modern global health-crisis management framework](#) – Burkle, *J Exp Med*
- [Magnitude of urban heat island explained by climate and population](#) – Manoli et al., *Nature*

Mitigation

News

[Which countries are meeting Paris targets – and which are not](#)

India, Morocco, Costa Rica and the EU as a whole are among parties to the Paris Agreement that are meeting their emissions targets, while China is showing some promise. On the other hand, Saudi Arabia, Russia and the United States are at the bottom of the list, far from meeting their targets. Even if all countries were to meet Paris targets, global warming still would reach about 3°C by 2100, according to Climate Action Tracker.

– *National Geographic*



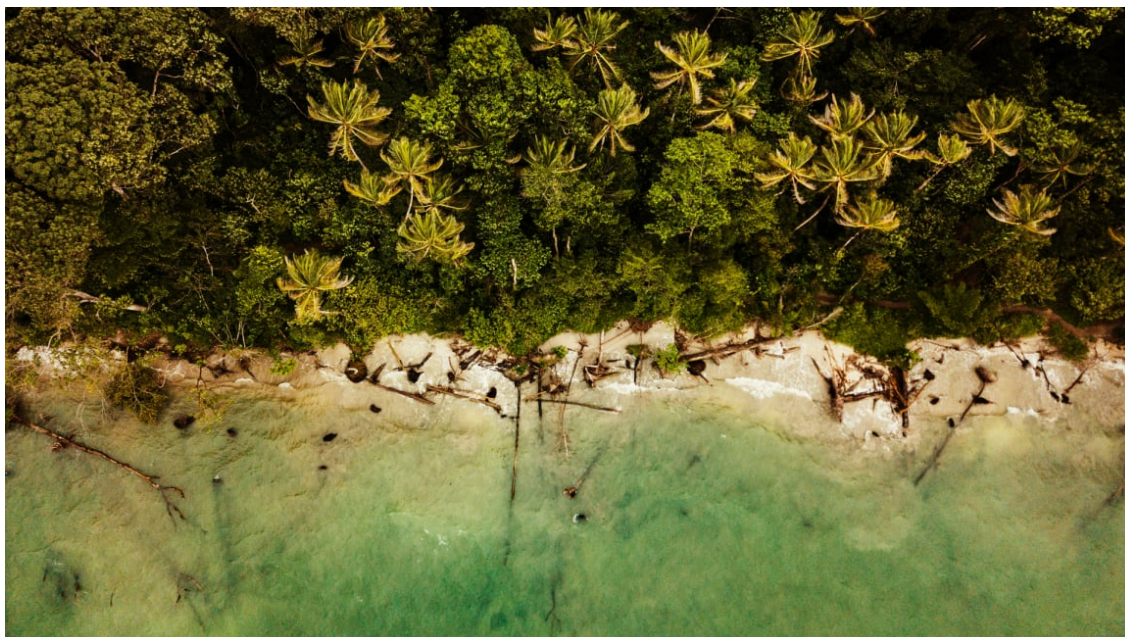
Morocco's huge solar power plant generates enough electricity to power two cities the size of Marrakesh, making the country one of only two that are on target to limit emissions to levels in the Paris Agreement.

Photo: Michael Taylor©IRENA

Read also:

- [How Chile became a climate leader](#) – *Ensia*

- [New evidence for health benefits of reducing GHGs – Anthropocene](#)



Costa Rica has been awarded the UN Champion of the Earth award, which is the UN's highest environmental honor. The country's energy is already more than 95% renewable, and in 2017, the country ran for a record 300 days solely on renewable power. Moreover, thanks to an aggressive push to reverse decades of deforestation, more than 50% of the trees have been restored.

Photo: [Berti Benbanaste](#)/Unsplash

Science

[Review: Using health impact assessment to optimize health benefits of climate policies](#)

Researchers evaluated findings from 12 health impact assessments (HIAs) for proposed climate change policies in the US. Policies included cap-and-trade legislation, heat-wave and sea-level-rise mitigation, transport measures, carbon-reduction strategies, and soil- and water-conservation, urban forest canopy, and sustainable-communities efforts. – Dannenberg et al., *J Public Health Policy*



A man in the midst of the Indonesian wildfires. Over a million Indonesians have been left with respiratory problems since the fires; policies that tackle climate change are ever-more important for the health of populations. Photo: Ulet Ifansasti

Read also:

- [The ocean is key to achieving climate and society mitigation goals](#) – Hoegh-Guldberg et al., *Science*
 - [Shenzhen: Climate-conscious urban growth mitigates urban warming](#) – Zhou et al., *Environ Sci Technol*
 - [A role for seaweed offsetting in mitigation](#) – Froelich et al., *Curr Bio*
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Economics & Finance

News

[Is sustainability becoming ‘baked-in’ to investment strategies?](#)

Last month’s Sustainable Investment Forum brought together 300 large global investors and regulators who concluded that companies ignoring the ongoing shift to clean energy and sustainability are at risk. Standard & Poors this week launched a climate risk index



Money has driven many aspects of climate change; now financial establishments can no longer ignore their impacts. Illustration by Matt Chinworth (<http://www.chinworthillustration.com/>)

Read also:

- [50 banks pledge to measure climate impact of investments](#) – Yale e360
 - [Money is the fuel feeding climate change](#) – Bill McKibben, *New Yorker*
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Science

[Willingness to pay for reductions in future health costs](#)

Researchers found support for policies to address future health impacts of climate change among a majority of people in a study of willingness to pay to avoid climate-change related deaths in the UK. The level of support varied with people's perceptions of the seriousness of these impacts and their financial circumstances. – Graham et al., *Public Health*



Coastal areas in the UK are particularly vulnerable to climate change impacts, such as rising sea levels and extreme weather events. Multimedia image by Shannon Ribbons (<https://ribbonsart.co.uk/>).

Read also:

- [Shanghai: Tradeoff analysis of flood control solutions](#) – Hu et al., *Water Res*
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Communication

News

[New York Climate Action Summit 2019 – a “boost in momentum but a long way to go...”](#)

Sixty-five countries and sub-national governments committed to cutting greenhouse gas emissions to net zero by 2050 and over 100 business leaders delivered concrete actions on mitigation, while over 100 world cities, many of the world's largest, announced new steps to combat the climate crisis. – *UN Press Release*



Activist Greta Thunberg attends a press conference where 16 children from across the world present their official human rights complaint on the climate crisis to the United Nations Committee on the Rights of the Child.

Photo: Kena Betancur/AFP/Getty Images

Read also:

- [Global climate strike: Greta Thunberg and school students lead the way](#) – *The Guardian*
 - [Climate legal teams for watching opioid “nuisance” court cases](#) – *Washington Post*
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Science

[Review: Key research questions in health and climate change](#)

Among research questions the public health community needs to answer are: how to weight the health of present and future generations; how to balance between the possible immediate adverse impacts of mitigating climate change vs. long-term adverse impacts of global change, how to limit the environmental impacts of public health intervention; and how to allocate resources. – Pascal et al., *Curr Environ Health Rep*



Amongst other health impacts, climate change means mosquitoes could start bringing tropical diseases such as malaria and dengue fever to Europe. Photo: EPA/Jeffrey Arguedas

Read more:

- [Review: the limits of disaster early warning from five continents](#) – Ayeb-Karlsson et al., *Disasters*



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