

## Climate, Health and Equity: A Dozen Questions Every Candidate Must Answer

**Climate change is a health emergency.** Last year over 150 leading health and medical organizations recognized that the climate crisis is a health crisis – our greatest health challenge of the 21st century. Climate change causes a myriad of health harms – heat illness, asthma and heart disease from more air pollution and wildfires, mental health problems from climate-related disasters, food and water borne infections, mosquito-borne disease, and more. Children, the elderly, low-resourced communities, and communities of color are disproportionately harmed, exacerbating health inequities. The climate crisis threatens the air, food, water, and shelter that we depend on for our survival, an existential threat for our children and future generations.

Health experts also recognize that the climate crisis could be one of our greatest health opportunities. That’s because climate solutions bring huge health benefits. Clean energy means less air pollution. Healthy and clean transportation means less air pollution and more healthy physical activity. Climate and health-friendly agriculture mean better nutrition and less water pollution. More trees and parks mean better mental health and more heat protection.

We need our leaders to recognize that the climate crisis is a health crisis, and that climate solutions are health solutions.

These questions align with the pillars of our Policy Action Agenda. For more information on climate solutions that protect and promote health, see the [U.S. Call to Action on Climate, Health and Equity: A Policy Action Agenda](#).

**Use these questions to ask your candidates what they will do to protect and promote health in the era of climate change. Brief recommendations are included at the end and in our engagement guide, but you can reach out with questions to Colin at [cnackerm@gmu.edu](mailto:cnackerm@gmu.edu)**

### The Questions

#### 1. Should the U.S. rejoin the Paris Climate Agreement as soon as possible?

In 2015, 195 countries – including the United States – signed the Paris Agreement, agreeing to voluntarily reduce climate pollution emissions to keep average global temperature increases to below 2° Celsius. Atmospheric CO2 levels are now above 417 ppm, the highest in millions of years. The resultant global warming – about 1°C – is already causing harmful human health impacts.



Because we share a common atmosphere across the entire earth, climate change is a global problem that can only be solved through international cooperation. That’s why the Paris Agreement is so important to our own national interest. Yet in 2017, President Trump announced that the U.S. would cease all participation in the Paris Agreement, and his administration has rolled back dozens of initiatives that would allow the U.S. to meet its prior emissions reduction commitments.

#### 2. What concrete steps would you take to reduce disproportionate health impacts of climate change on low-income communities and communities of color, and to ensure that these communities benefit from climate solutions?

The health impacts of climate change are not experienced equally. Often those who contribute the least climate pollution are the ones who are hit first and worst by climate change. Climate change exacerbates health inequities, disproportionately harming the most vulnerable among us – children and pregnant women, people with low income, the aged and people with disabilities and chronic illnesses, some communities of color, indigenous people and tribal communities, immigrants, marginalized people of all races and ethnicities, and outdoor workers.



These communities have less access to the political, economic, social and environmental resources that enable them to cope with climate threats and face potentially unmanageable pressures as the impacts of climate change mount. Systemic racism and injustice also compound the health impacts, which has similarly been documented during the COVID-19 pandemic.

The proposed solutions aren't always equitable, either. When wealthier communities are the first to be targeted for investments in solar energy or electric vehicles, health disparities can be exacerbated in vulnerable communities. Intentional efforts must be made to ensure that equity is at the center of proposed climate solutions, and that frontline communities have an active role in the development of said solutions. Some examples of climate solutions that can help to redress these health inequities include: targeting emissions reduction measures in frontline neighborhoods with high levels of exposure to diesel exhaust or refinery pollution; improving climate resilience in impacted communities through funding for drinking water infrastructure or trees and parks; allocating a set percentage of climate investments to benefit disadvantaged communities; and subsidizing low-income people so they can benefit from energy efficiency, weatherization, renewable energy, and zero-emission vehicles.

### 3. What goals and timelines do you support for a transition to clean renewable energy?

Burning fossil fuels for energy releases hundreds of millions of tons of carbon pollution. It also releases harmful particulate pollution, sulfur dioxide, and nitrogen oxides that are responsible for thousands of premature deaths, tens of thousands of asthma attacks, adverse impacts on pregnancy outcomes and children's brain development, and many billions of dollars in health care costs. Pollution from fossil fuel-based energy [disproportionately impacts](#) the health of people of color and low-resourced communities. For example, over three quarters of African-Americans live within 30 miles of one of these polluting plants.



Switching to 100% clean renewable energy is one of the best things we can do to let every American breathe clean air, and to stop the toll of dirty energy on our health. Many experts agree that we have the technology and the know-how to get 100% of our electricity from renewables as early as 2025. Yet in 2019, over 60% of U.S. electricity still came from burning fossil fuels, even though the costs of solar and wind have declined remarkably in the last few years. Nearly two-thirds of U.S. States have adopted Renewable Portfolio Standards (RPS) that create goals and timelines for achieving a certain percentage of renewable electricity in state electricity use. Sixteen states have established timelines for achieving 100% renewable or clean energy (with some including nuclear or biomass energy). Equity provisions in renewable policy can seek to ensure that all communities benefit, such as recent New York state legislation that set a goal of ensuring that 40 percent of clean energy program funds provide benefit for disadvantaged and environmental justice communities.

### 4. How would you work to expand investments to ensure that people in multi-unit housing and low income homeowners have access to the health and financial benefits of energy efficiency improvements?

Many low-income households are faced with choosing between heating and eating, because they suffer "energy poverty" due to very high energy bills. Low-income households often pay [three times more](#) than higher-income households for their energy. Energy efficiency programs save an average of more than \$100 in utility bills for low income households living in multifamily buildings. This not only helps pay their bills and avoid service disconnections, it also allows families to spend more money on other important necessities like food, medicine, or education. The climate crisis makes it even more important to address energy poverty. As extreme heat events become more frequent and more severe, electricity costs should never be a barrier to using life-protecting air conditioning.



Energy efficiency is also one of the best ways to reduce our reliance on fossil fuels for energy and reduce air pollution. The Low Income Heating Assistance Program (LIHEAP) and Weatherization Assistance Program are examples of federal programs that help low-income Americans benefit from energy efficiency. But these programs are not sufficiently funded to help all those who suffer energy poverty and its related health impacts.

## 5. How would you align transportation expenditures with efforts to reduce climate pollution and improve health?

Transportation produces nearly a third of all US greenhouse gas emissions – more than any other sector – and our current transportation system is associated with a grim array of health effects: respiratory and cardiovascular disease and adverse reproductive outcomes from auto emissions that pollute the air, motor vehicle crashes causing thousands of deaths and disabilities each year, noise pollution that increases heart disease, and congestion that causes mental stress and takes away from family time. And our auto-centric transportation system also leads to physical inactivity which is a major contributor to chronic diseases such as obesity, diabetes, heart disease, and osteoporosis.



We can reduce air pollution and damage to the climate from transportation through strong fuel efficiency standards and investments in the expansion of zero-emission vehicles (especially trucks and buses). But the biggest health benefits will come from making it easier for people to use public transit, and safely walk and bike. Shifting to “active transportation” reduces air pollution too, but it can also significantly reduce chronic disease related to lack of physical activity, potentially reducing the burden of cardiovascular disease by 14% and diabetes by 7% and averting billions of dollars in health care costs. Transportation systems with good active transportation options are also more affordable, and improve access to jobs, education, and services for everyone.

But without a very significant shift in the way the federal government funds transportation, we shouldn’t expect to reap the benefits of a healthier transportation system. We need a massive investment in public transit, in complete streets that provide safe places for walking, bicycling, and wheeling, and in linked housing policies to assure that people of all income levels can afford to live in neighborhoods with good access to jobs, schools, and groceries.

## 6. How do you plan to help America’s farmers shift to regenerative agriculture and increase access to sustainably grown, healthy fruits and vegetables?

Our current food and agricultural system contributes to poor nutrition and poor health. Over-use of nitrogen fertilizer and concentrated animal feeding operations produce climate-warming methane and contaminate our drinking water. About 40% of the food we produce is wasted, leading to more methane from landfills. And industrialized agriculture uses toxic herbicides and pesticides produced from fossil fuels that sicken farmworkers and rural communities.



By changing the way we grow our food, eating healthier diets, and reducing food waste we can reduce climate pollution, chronic illness, and food insecurity. Regenerative agriculture practices that have been used by indigenous peoples for millennia can help build healthy soils which sequester carbon and improve the nutrient value of crops. Local and sustainable farming can reduce carbon emissions from transporting food, and increase access to affordable and healthy fruits and vegetables

For our health and for the climate, we need to change agriculture subsidies to support regenerative agriculture and to grow healthy fruits, vegetables, and nuts, provide meat free options in school meals, and protect our water from harmful agricultural practices.

## 7. What would you do to ensure a just transition for workers and communities adversely impacted by climate change and transition to a green economy?

Rapidly transitioning various sectors of the US economy to reach net-zero emissions and adapt to climate change requires intentional measures that protect and support workers and communities. [Just Transition](#) principles aim to move equitably from an extractive economy to a regenerative one, with low-waste, no exploitation, and sustainable systems. Efforts must be made to alleviate impacts on communities affected by job or economic losses related to climate change and climate policy, using inclusive engagement with stakeholders. Examples of solutions include further investments in workforce training and development, more local hiring programs, and community-driven infrastructure.



Clean energy can lead the way. The US clean energy workforce has grown rapidly in the past decade, reaching an [estimated](#) 3.3 million workers. Jobs in solar and wind have increased exponentially, consistently ranking among the fastest growing occupations in the country. But the COVID pandemic led to hundreds of thousands of layoffs and small businesses may be slow to bounce back. Recovery and stimulus programs that center equity and support the clean energy industry can ensure progress toward a just transition.

## 8. What steps will you take to assure that every American has access to clean and safe drinking water?

While tremendous progress has been made on preventing water contamination since the passage of the Clean Water Act and the Safe Drinking Water Act nearly 50 years ago, millions of people in the US are still exposed to unsafe water every year. A 2015 [study](#) found that nearly 21 million people in the US were exposed to water systems that violated health-based quality standards. These are largely due to contamination from chemicals, carcinogens, pathogens, and metals that are associated with health impacts ranging from food-borne illness to cancer and birth defects. As the Flint lead-in-water crisis showed, Blacks and Latinx are [disproportionately exposed](#) to higher levels of contaminants, especially in low-income and agricultural communities. Native Americans frequently lack access to clean drinking water. Climate impacts such as drought and flooding further threaten our access to clean water. Planning for sustainable groundwater use, water conservation, and stronger rules and enforcement to prevent water contamination are more critical than ever. The Trump administration has rolled back rules that protect our drinking water.



## 9. How would you support local, state, and federal health agencies to proactively inform the public about the health impacts of climate change and the health benefits of climate solutions?

Public health communication and media campaigns are proven methods to improve community health. Decades of tobacco prevention campaigns, for example, have saved millions of lives and billions of dollars in health care costs. Similarly, broad campaigns on drunk driving, automobile safety, and mosquito control and protection, have successfully changed the social and physical landscape and saved countless lives.



While two-thirds of the U.S. public is [concerned](#) about climate change, far fewer understand that the climate crisis is a health emergency. Those who do connect climate change and health are more likely to support the urgent climate actions required to protect our health from more dire climate impacts.

Just as the tobacco industry spent billions of dollars to hide the truth of tobacco's harms while its products killed people, so too the fossil fuel industry has tried to persuade the public that its products are safe or that climate change is "a hoax." The five largest oil and gas companies spend an [estimated](#) \$200 million annually on climate lobbying. Only a well-funded, coherent campaign to tell the American people the truth about the health harms of climate change can counter this intentional disinformation.

## 10. What actions will you take to strengthen the resilience of the health care system to withstand more frequent and severe climate-related disasters?

We've learned the hard way that extreme weather events can paralyze the hospitals and health care facilities we depend on most in an emergency. During Superstorm Sandy, some of New York's leading hospitals sustained major damage and required evacuation of patients and employees; several were shut down for months. After Hurricane Maria, healthcare providers struggled to access electricity and provide care. Many deaths [occurred](#) in the months following the storm as extreme heat and lack of access to essential medicines and medical care for chronic conditions continued. Wildfires caused rushed evacuations of hospitals and skilled nursing facilities in California. Nurses and physicians tell harrowing stories of these frightening events, and how challenging it was to keep patients safe without better preparedness.



It will take coordinated planning across the public and private sectors to assess the capacity of our health care system to sustain coming extreme climate-related events and to provide the necessary guidance and support to build resilient health care systems with the capacity to care for people when it is most needed. Hospitals and health care systems will also need resources to strengthen their physical infrastructure (for example through building renewable energy microgrids to keep the power on in an emergency).

## 11. What programs would you implement to build community resilience to protect the health of all communities in face of the climate crisis?

Climate change is already increasing the frequency and severity of wildfires, extreme heat, and extreme precipitation and flooding events. July 2019 was the planet's hottest month ever recorded, 2020 is on course to be the warmest year since record-keeping began in 1880. Extreme heat alone causes an [estimated 12,000](#) deaths in the US annually, and that toll is expected to increase exponentially by 2100. People of color and low-income families are more likely to live in areas with fewer trees and green spaces, more dense and older buildings, and more aging and inadequate infrastructure. These urban heat islands exacerbate the risks, especially for the elderly, people with chronic illness, and those without air conditioning. [Recent research](#) demonstrated that historical practices of “redlining” during urban planning, which disincentivized economic development in communities of color, led to increased heat island effects in 94 percent of the redlined cities examined. In New York City, 50 percent of heat-related deaths occur in the Black community despite comprising 25 percent of the population. They're working to [improve access](#) to funds to weatherize homes and provide air conditioning, protecting vulnerable populations from heat.



There are many opportunities to reduce climate risks: urban greening brings parks, gardens, agriculture, forests, and other natural features to urban areas. Green infrastructure uses trees, rain gardens, permeable pavements and other strategies to better manage stormwater. And new building technologies such as cool roofs can significantly lower city temperatures. These strategies also improve health — by cleaning the air and water, providing green spaces for physical activity, and enhancing mental well-being. Local and state governments can incentivize and fund the use of these strategies to build climate resilience and better health, especially in the most impacted communities.

## 12. How can we rebuild and improve our public health infrastructure to better address crises like COVID-19 and climate change?

As the COVID-19 pandemic has shown, our public health infrastructure has been severely frayed through years of neglect and underfunding. The situation for climate-health capacity is even worse. Only 16 states and 2 cities receive even very limited funding to address climate health impacts through the CDC's poorly funded Climate Ready Cities and States program. Most states, and over 3,000 local health departments, have no formal support or capacity and little guidance. Few resources have gone into building the capacity of local, state, and federal agencies to protect and promote public health in the era of climate change.



The current COVID-19 outbreak underscores the importance of monitoring emerging health threats and having the capacity to respond. Our public health system needs resources and capacity to: enhance domestic and global tracking for climate-related infectious disease and injury, including infectious diseases; train the public health workforce – including community health workers – to promote health in the era of climate change; analyze the potential health risks or benefits of proposed climate actions, and educate the public on important health risks.

### How to Take Action

- Candidates participate in many events and forums, sponsored by community-based and political organizations, or they host their own. Sign up to participate; see if you can send in questions in advance or sign up to ask a question. To find events you can sign-up for candidates mailing lists, reach out directly, or use an [online resource](#). If you're with a 501(c)(3), make sure you first understand the legal guidance and limitations. Bolder Advocacy has a [good resource](#) to start with.
- Consider emailing these questions to all candidates from each party running for office; ask them to read it or ask if they'd like to discuss on call.
- Consider choosing 1-2 questions, re-formatting them as a brief op-ed, and submit it to a local media outlet. Share the questions with local organizations and ask if they can disseminate.
- Consider hosting your own virtual, nonpartisan candidate forum to learn about the views of many candidates. If a 501(c)(3) nonprofit, ensure that you understand the legal guidelines and guidance – here's a [good resource](#) to start with.

**More resources and ideas are available in our engagement guide. For questions, contact Colin at [cneckerm@gmu.edu](mailto:cneckerm@gmu.edu)**