Eight Lessons from COVID-19 to Guide Our Climate Response

The global response to the ongoing pandemic can teach us how we should, and shouldn't, respond to the climate crisis. And most important, it shows that we can do something.

The climate crisis, like the COVID-19 pandemic, is a global problem that will require global effort to fix. Credit: NASA images by Reto Stöckli, based on data from NASA and NOAA

By Kimberly M. S. Cartier 24 April 2020

Just a few months ago, travel and trade crisscrossed the world, scientific research proceeded uninterrupted, farmers accessed global markets, and, to many, the climate crisis seemed far away and insurmountable. In the time since, millions of people have been infected with the novel coronavirus, and more than 100,000 people have died from coronavirus disease 2019 (COVID-19). The climate crisis remains far from people's minds in the face of the present disaster, yet its progress has not stopped.

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"So many people might be wondering, 'Why are we having a conversation about climate change when all we can think about is our current pandemic?'" said Katharine Hayhoe (http://www.katharinehayhoe.com/wp2016/), an atmospheric scientist at Texas Tech University in Lubbock. "With climate change, it's as if we are where we were at with the pandemic 4 [or more] weeks ago."

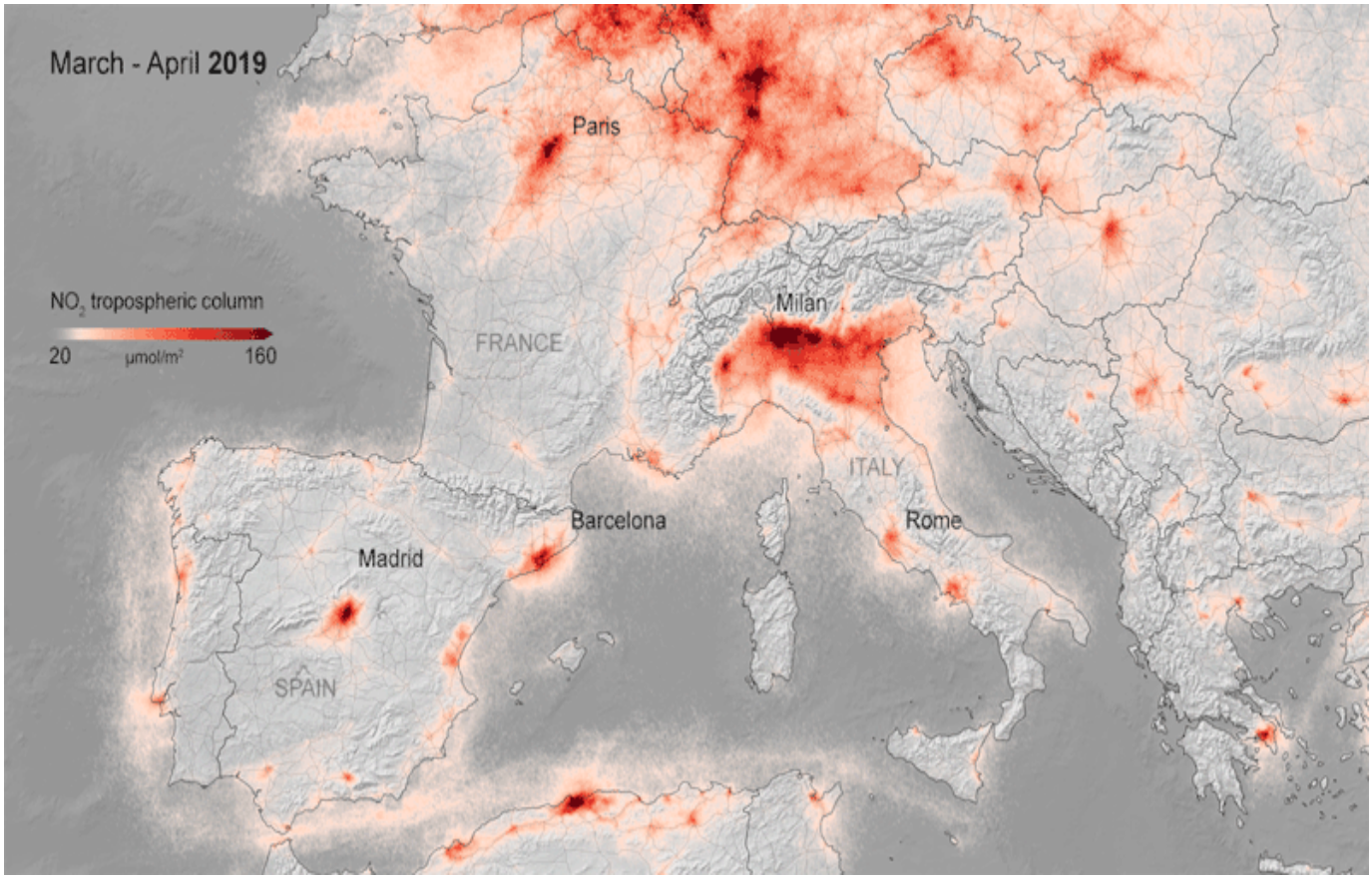
Countries' responses to COVID-19 outbreaks have ranged from swift, decisive, and forward-thinking to delayed, contradictory, and reactionary. In a webinar (https://www.facebook.com/450228191700475/videos/219184242732690/) hosted by Trinity College Dublin (TCD) in Ireland on 7 April, climate experts discussed what the global responses to the ongoing pandemic can teach us about what's needed to act on climate change in an effective and equitable way. Here are eight takeaways from the discussion.

1. We Need Transformative Change

A 2019 United Nations report (https://eos.org/articles/biodiversity-report-paints-a-bleak-picture) called for transformative change to address plummeting biodiversity across the world. Such change would include responsible corporate practices, disincentivizing unsustainable practices like deforestation and fossil fuel production, and strengthening green policy initiatives, said ecologist Jane Stout (https://www.tcd.ie/Botany/people/stoutj/) of TCD.

"And you could say that this pandemic has created transformative change. Unplanned, but transformative all the same," Stout said. "It's shown us that society can change. The way that we

live and work can change. People don't have to be traveling all the time. There's more remote working. There's more connection with nature in our free time."



Nitrogen dioxide concentrations were reduced dramatically over Europe as the continent shut down during the coronavirus pandemic. Most of the change was due to lower industrial output. Credit: Contains modified Copernicus Sentinel data (2019–2020), processed by KNMI/ESA (https://www.esa.int/ESA_Multimedia/Images/2020/04/NO2_concentrations_over_Europe#.XpoE5qTpowI.link)

But, Hayhoe added, the pandemic has demonstrated that "it is industry, it's not personal choices" that have the largest impact on the climate crisis. "Even if we as individuals did everything we could to cut our carbon footprint, to live within our personal boundaries, that in and of itself as individuals would not be sufficient to fix either the ecological crises or the climate crisis. And that's why we need system-wide change."

2. We Need Biodiversity to Remain Healthy

"Research (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5413872/) has shown that high biodiversity reduces the risk of animal vector diseases in human populations," Stout said. Many species have been rapidly losing habitat because of deforestation and continued warmer-than-average temperatures, Hayhoe added. Those animals have been pushed toward human-populated areas,

which increases the risk of transmission of zoonotic diseases.

"For example," Stout said, "in mosquito- and tick-borne diseases, where there's a high diversity of wild vertebrates in a particular area, the mosquitoes and the ticks feed on them instead of on us. They feed on this diversity of hosts, most of which are actually poor reservoirs for the pathogens. This results in lower infection rates in humans."

3. We Need to Invest in Nature

Preserving coastal habitats (https://eos.org/articles/coastal-wetlands-save-1-8-million-per-year-for-each-square-kilometer) would save communities money from property damage related to sea level rise and tropical storms. Farms would lose fewer crops from increasing floods (https://eos.org/features/high-water-prolonged-flooding-on-the-deltaic-mississippi-river). Green energy technologies (https://eos.org/articles/bipartisan-focus-on-energy-innovation-emerges) could boost economies through job production and market investments.

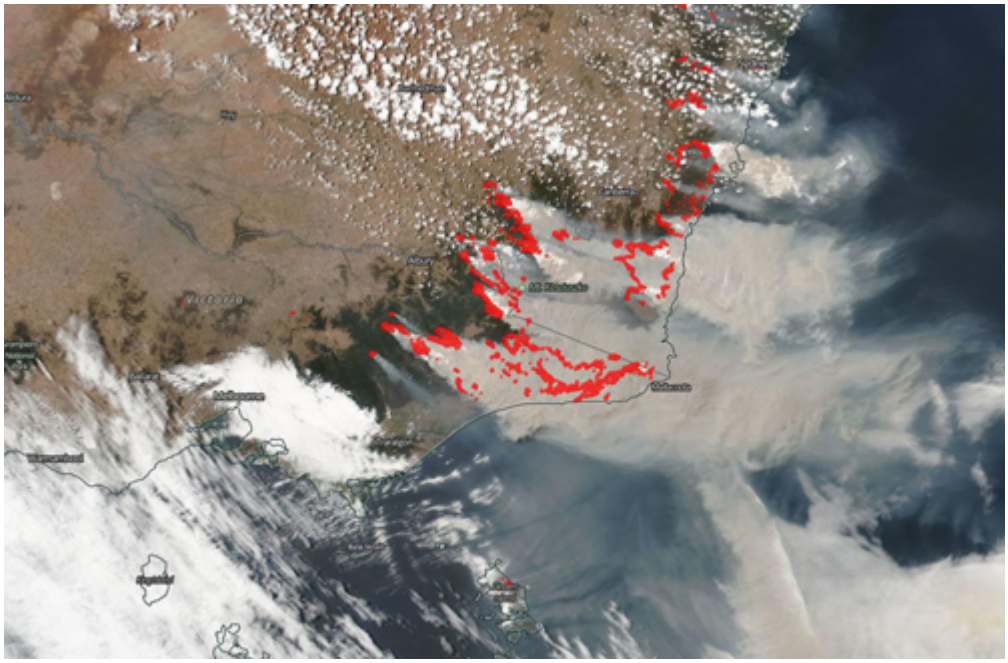
"Lots of people don't like the idea of monetizing nature," Stout said. "But it's not all about monetizing. It's about shining a light and showing the value of nature so that we have got those voices, so that we have got that power, to rebuild an economy in a different way."

4. We Need to Close the Psychological Distance

The biggest climate change myth is that the problem won't affect us as individuals.
The biggest climate change myth, Hayhoe said, is that the problem won't affect us as individuals. This same type of psychological distance was seen in many countries that had not yet seen cases of the novel coronavirus. "The health and the safety of our family, our loved ones, our friends, our community, the people and places we care about," Hayhoe said, "that's what the pandemic puts at risk, and that is exactly what climate change puts at risk as well."

5. We Need to Make It Personal

Climate scientists and communicators can help the general population close psychological distance through effective stories and counterarguments about the consequences of climate change, said TCD humanities professor Michael Cronin (https://www.tcd.ie/langs-lits-cultures/staff/french/mcronin.php).



This image from NASA's Aqua 5 satellite in January 2020 shows locations of active burning in Australia (red) and wildfire smoke drifting over the Pacific Ocean. Credit: NASA (https://www.nasa.gov/image-feature/goddard/2020/rains-bring-very-temporary-relief-to-australias-fires)

"It struck me about the bushfires in Australia (https://eos.org/articles/five-environmental-consequences-of-australias-fires), where terrible things were happening, hundreds of thousands of hectares of bush were being destroyed. But it's when the koala bears came center stage that all of a sudden you got this kind of global resonance."

"The people who are hell-bent on destroying the planet are supremely good at using particular forms of rhetoric.... So it seems to me that [climate activists must] go back and school ourselves in rhetorical arts of the ancients as one way of dealing with the current crisis."

6. Small Businesses Need Help to Make Big Changes Quickly

Widespread shutdowns of schools and businesses have been necessary to slow the spread of COVID-19, yet those actions have also put millions of people out of work and threatened the survival of small businesses.

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"This is a whole community, a whole swath of our population, who feel like they're facing annihilation in climate change," said Darragh McCullough (https://twitter.com/darraghmccullou), a

journalist and farmer in eastern Ireland. In the past weeks, McCullough's farm and many others (https://www.npr.org/2020/03/25/820239298/netherlands-huge-flower-sector-wilts-as-coronavirus-hurts-business) have had to adapt as world markets, trade, and travel policies changed without notice. Many fear similar economic annihilation from climate solutions that threaten their livelihoods.

"Farmers are more than willing to put their arms around alternatives," McCullough said, but they need support during the transition. "We're getting there," he added, "but it brought home to me that a lot of people talk about, 'Well, farmers, why don't they try this or why don't they change what they've always been doing and try a new way [to mitigate climate change]?' It's not very easy."

7. We Need a Just Transition

As we outline the needed transformative change for the climate, we must ensure that the transition is just and fair (https://www.wri.org/climate/expert-perspective/toward-just-transition) for workers, said McCullough. In Europe (https://www.bbc.com/future/article/20200420-coronavirus-why-some-racial-groups-are-more-vulnerable), the United Kingdom (https://www.theguardian.com/world/2020/apr/07/bame-groups-hit-harder-covid-19-than-white-people-uk), and the United States (https://www.motherjones.com/coronavirus-updates/2020/04/covid-19-has-infected-and-killed-black-people-at-alarming-rates-this-data-proves-it/), Black people and Native and Indigenous peoples (https://people.com/human-interest/navajo-nation-lost-more-lives-coronavirus-than-13-states/) are dying of COVID-19-related causes at much higher rates than white people. Also, economically vulnerable people are forced to work in ever more dangerous conditions or lose the paycheck they need to feed their families. The changing climate puts these same groups at risk.

"The poorest in society will suffer most."
Both in the current pandemic and under climate change, "migrant workers are some of the most vulnerable workers in any economy," McCullough said. They have been deemed essential (https://www.theguardian.com/world/2020/mar/31/us-coronavirus-outbreak-california-farm-workers) to the agriculture sector yet are offered little to no protection. "Whether it's Ireland, or America, or anywhere else, they tend to be at the bottom of the economic heap on minimum wages with minimal supports."

"The poorest in society will suffer most," McCullough added, so drastic, transformative change will need a support system in place ahead of time for the most vulnerable members of society.

Society now needs to respond to the climate crisis with the same urgency and at the same

comprehensive scale.

8. We Can Fix This

The coronavirus pandemic has "shown us that governments can implement socially unpopular policies in the interest of public good and to the detriment of the economy," Stout said. "It's shown that we can respond to a crisis when we need to. And climate change and biodiversity loss are global crises that are also threatening human health." Society now needs to respond to the climate crisis with the same urgency and at the same comprehensive scale.

"What this pandemic has brought home," Hayhoe said, "is that we are all part of this interconnected system. To care about biodiversity, to care about the integrity of our ecosystems, to care about our planetary boundaries and the limits on the resources we can use, and, last but not least, to care about climate change, the great threat multiplier, we only have to be one thing. And that one thing is a human living on planet Earth."

—Kimberly M. S. Cartier (@AstroKimCartier (https://twitter.com/@AstroKimCartier)), Staff Writer

This story is a part of Covering Climate Now's week of coverage focused on Climate Solutions, to mark the 50th anniversary of Earth Day. Covering Climate Now (https://www.coveringclimatenow.org/) is a global journalism collaboration committed to strengthening coverage of the climate story.

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