

## What can we learn about climate change from the COVID-19 pandemic?

With the novel COVID-19 forcing the globe to come to a world-wide stop, there is an opportunity to understand what the world could look like if humans continued to manage their behavior. In the last few months, oil prices have plummeted, pollution severely reduced and various wildlife have returned to cleaner ecosystems. This pandemic has shown a green new reality and taught the world lessons that can be applicable to tackling climate change. It demonstrates the need for strong leadership, global cooperation and shows a glimpse of the possibility of a greener future. Because the COVID-19 pandemic and climate change are both current global crises, the world can draw many conclusions from actions taken in tackling the pandemic and apply them to climate change to ensure efficiency and effectiveness. Most notably, the pandemic illuminates the need for strong governmental action to combat climate change.

During this pandemic, hopefully, the public can regain its trust in science (Shepard, 2020). Climate deniers and skeptics have long been spouting the narrative that climate change related facts are based in some type of faulty science. Many do not believe the work researchers, professionals and academics and all they have done to publish articles that they hope will illuminate policy-making decisions. Now, climate change skeptics can observe how much carbon emissions and other types of pollutants the world produces. Because of decreased consumer activity, including transportation, many of anthropogenic effects have been visibly mitigated in the last few months of 2020. This pandemic strongly assures people that human activity has an impact on the natural world and processes. The graph below pictures the amount of tropospheric nitrogen dioxide in Eastern China, which is mostly produced by burning fuels (Milman, 2020)

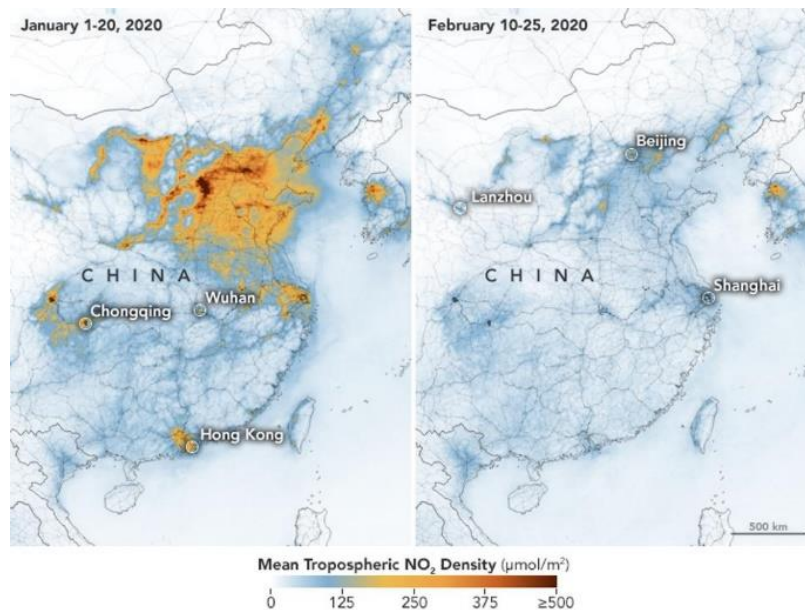


Figure 1. Mean Tropospheric NO<sub>2</sub> in China in Jan. and Feb. (Milman, 2020)

There is a drastic difference in the sheer amount of pollution produced from January 2020 to February 2020. Contrary to what deniers claim, global warming -- to the extent it was at before the pandemic -- is not part of any natural cycle. Humankind's impact on the environment is evident and should not be ignored. One can hope that, in light of the coronavirus crisis, people will better understand that science is an ally, not an enemy.

In times of crisis, strong leadership is required to steer countries in the correct directions with strict policy and enforced guidelines. Not only does it require leaders to establish order, it also calls for cooperation among themselves. This type of call to action has already been heard from environmentalists worldwide who warn of a diminishing future if human activity continues business-as-usual. The coronavirus crisis, like climate change, is a global event that will impact all at varying levels of frequency and severity. The difference between the two is the visibility. Climate-related effects are most often felt by the marginalized community and are not as obvious to the general public, especially those sitting at a privileged position. On the other hand, the pandemic is very visible and crosses borders between the wealthy and poor. Alarming, climate-related fatalities and economic impact will likely far exceed the pandemic of 2020 (Shephard, 2020). Because of this difference in visibility, leadership with foresight and climate action has to occur now to avoid future physical and economic disaster. From the pandemic, we learn that individuals will listen most when there is strong policy enforced, such as Singapore's strict fines for breaching stay-at-home notices. Without state-initiated lockdown and rules about wearing masks, virus conditions would be notably worse. If the governments see the need to step in to curb the virus, should they not apply the same logic to climate change?

Lately, there has been an increase in the number of articles calling for large-scale change in order to mitigate climate change. People recognize that the average consumer is not feasibly able to make all the correct decisions on his own. It is quite convenient for corporations to place the blame for pollution and emissions on individuals instead (Levermann, 2019). Climate change presents a massive problem that threatens the world's physical, social, mental, political, and economic welfare. The stakes and risks are massive, and impacts are devastating -- similar to the pandemic. If we do not expect consumers to take responsibilities for crises such as the pandemic, would it wise to do so for another crisis like climate change? According to one article, individuals are statistically blameless (Byskov, 2020). The article explains even though consumers' paying power is strong, it "pales in comparison to that of international corporations," which only governments can control (Byskov, 2020). A report found that 100 companies have been responsible for 71% of global emissions for the last three decades (Byskov, 2020). Large businesses and governments should bear the burden of curbing emissions and slowing down global warming. The biggest responsibility the individual has, one article writes, is to stay informed and collectively demand their politicians make the correct decisions (Levermann, 2019).

A conversation of climate change would be lacking if not addressed from a political ecology viewpoint to understand the varying power relations at play. Climate change is an outcome of human activity and typically understood to impact all of humanity, however, we have to consider the unequal impacts from power and privilege. Marginalized groups will be harder hit by crises, including climate change and the pandemic. Already, we see unproportionally amounts of sickness and death from vulnerable communities where there has already been a history of environmental pollution (Holden, 2020). In environmental justice movements, there is a pressing need for the individuals to step up and form grassroots movements from the bottom. In these cases, the role of the individual is more important, not because the state cannot act, but because the state refuses to act. It is unjust to leave marginalized groups to take time and resources to rally for their own health and safety -- which the privileged often take for granted.

Despite the silver-lining the current situation has brought the environment, environmental issues are still pertinent. The sea ice in the Arctic is still very likely to vanish before 2050 and that the Australian bushfires released more carbon than the country's annual carbon dioxide output (Milman, 2020). Ideally, in light of the COVID-19 pandemic, people will change their individual behavior and call for larger-scale governmental change. The "disorientingly green reality" offers a hopeful glance at what our communities could look like (Milman, 2020). There are many striking similarities between tackling the coronavirus and climate change, including the need for international cooperation, governmental and individual action, and accepting science-backed facts researched by professionals. The world has seen governments take a more dominating role as the pandemic created many risks and uncertainties. This type of leadership and quick action is what we should be seeing for climate change. Currently, individual consumers should not be blamed, and corporations should be more regulated. As Gina McCarthy, former head of the US Environmental Protection Agency, said, "This has been the lost message on climate, that it's a human problem, not a planetary problem."

Iris Chien

Environmental Science and Computer Science

UNC '22

LinkedIn: <https://www.linkedin.com/in/iris-chien1/>

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Iris Chien is currently a UNC junior, pursuing degrees in Environmental Science and Computer Science. She is most interested in the intersection of sustainability, urban planning, and technology. After taking ENEC 201, Iris got involved with the Clean Tech Summit as a social media intern in 2019. She recently completed a semester abroad in Singapore, where she took urban planning and statistic classes. This summer, she is working in Taiwan at Stantec as an environmental consulting intern. In her free time at UNC, she is a research assistant in a marine microbiology lab and Secretary of the Chinese Undergraduate Student Association.