The COVID 'Anthropause' and Planetary Health: Lessons for the Future

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The Coronavirus disease in 2019 (COVID-19) is now considered one of the biggest challenges and catastrophic worldwide effects since World War Two. Whilst there have been national and international curfews previously, the intensity and duration of lockdowns due to COVID-19 have never been deployed on a global scale to counter the spread of diseases. The hit was felt by the EU due to the sudden stop of economic activity, and it is important not to downplay the socio-economic effects COVID-19 has had; however, the COVID-19 'anthropause' (Chuan Loh, 2021, p.4430) provides valuable research on how economic activity is still coupled with greenhouse gases (GHGs). The anthropause provides significant insights as to what happens to the environment when economic activity suddenly comes to a halt, which arguably teaches us how, going forward, environmental policy should tackle climate change.

This article will go through the environmental effects that the anthropause has had, understanding that a horrifying global pandemic

paradoxically resulted in some positive health impacts and planetary health impacts. Unfortunately, the resumption of large industrial activities will likely reverse all these environmental improvements. COVID-19 provided an invaluable lesson that globally, we are much further away from GDP being decoupled from GHGs than was portrayed by world leaders, and that green growth is not the most suitable policy response. This article will then discuss the effects COVID-19 had on the European Green Deal (EGD). Despite COVID-19 being a major economic crisis, and unlike previous economic crises that have caused environmental and climate objectives to be pushed down the agenda, it actually deepened integration, and the EGD became the recovery strategy for the EU post COVID-19.

1.1 Environmental Impacts: Air Pollution

According to the WHO, '4.6 million people die annually from diseases and illnesses directly linked to unhealthy air quality' (Chuan Loh, 2021, p.4427). Air pollution has been associated with prevalent respiratory diseases such as asthma, pneumonia, pulmonary diseases, and many others. 'In 2017, air pollution caused 4.9 million deaths globally, with low-income economies suffering the most' (Hassan Shakil, 2020, p.4). Air pollution can also cause nutrient pollution in waterways, causing acid rain, which harms freshwater ecosystems, thus leading to the deterioration of water quality.

During the anthropause, global air quality improved due to lower anthropogenic emissions; this is clearly a direct correlation of lockdown measures reducing mobility. Travel restrictions led to a cut in tourism, thus reducing emissions from air travel being suspended. Studies found that air pollutants like Nitrous Oxide and Carbon Dioxide emissions 'dropped significantly due to the halt in industrial and vehicle operations worldwide' (Hassan Shakil, 2020, p.4). Some data even showed that there was nearly a reduction of '1 million tons of carbon emissions during the lockdown, which is equivalent to 6% of global emissions.' (Chuan Loh, 2021, p.4428).

In Barcelona, Spain, a tourist capital, air pollution 'dropped by 50% during the lockdown period; notably, nitrogen dioxide (NO2) and black carbon (BC) rates declined by 45–51%' (Chuan Loh, 2021, p.4428). Data collected 'on the level of concentration of aerosol optical depth (AOD) by Moderate Resolution Imaging Spectroradiometer onboard National Aeronautics and Space Administration's (NASA) satellites indicated a massive reduction by 50% of AOD in the India region's air quality'(Chuan Loh, 2021, p.4428). Also, in China, the Ozone Monitoring Instrument aboard a NASA spacecraft reported a '30% NO2 emissions reduction just in Central China.' (Chuan Loh, 2021, p.4428).

Lastly, 'globally atmospheric emissions were reduced by 0.6 Mt of PM2.5, and 5.1 Mt of SO2 and NO2′ (Chuan Loh, 2021, p.4428). It is noteworthy that 'in the 32-year history of intergovernmental climate policy, none of the

attempts by any government or any international agreement has had such a drastic mitigation impact on air pollution' (Chuan Loh, 2021, p.4428).

1.2 Environmental Impacts: Sea Life

There were various unexpected positive aspects the pandemic lockdowns had on planetary health due to industry shutdowns and travel bans. An example is the restoration of some aquatic life. It was feared that fishing communities and ports could become hotspots for COVID-19 infections due to the migratory nature of fishermen and the frequency of tourists. So many fisheries across the world experienced partial or complete shutdowns, thus resulting in a reduction of fishing activities. There was a reduction in pollution in the seas as there were fewer tourists throwing rubbish in the sea, less acid rain, and less industrial waste being dumped into the ocean, so marine ecosystems had time to recover and even 'endangered turtles are experiencing a resurgence ' (Chuan Loh, 2021, p.4429). There were also reports showing increases in sea mammals such as killer whales, dolphins, and seals in regions where they have not been seen in decades (Chuan Loh, 2021, p.4429).

In Venice, Italy, after just two months of pandemic lockdowns, the water appeared cleaner and aquatic life became more noticeable, something that was not seen in the city for a number of years. 'A survey from observations on Salinas, Manta beaches indicated that the lockdown also led to a temporary improvement of environmental conditions similar to marine protected areas.'

1.3 Environmental Impacts: Adverse Effects

Whilst the pandemic lockdowns have had short-term positive impacts on air pollution and sea life, COVID-19 has also had negative consequences on the environment. Due to the large amount of medical litter and waste and the lack of initiatives to recycle medical rubbish for fear of spreading COVID-19 further. 'In Wuhan, for example, hospitals generated 240 metric tons of medical waste per day compared to 50 tons per day in the pre-COVID-19 period' (Hassan Shakil, 2020, p.2). Similarly, as everyone was locked inside, there was an increased reliance on online shopping, food deliveries, and an increase in the use of appliances to entertain ourselves, electricity, and water at home. Whilst this is not comparable to the industry decrease in pollution, the domestic lifestyle was unsustainable both for the environment and for human wellbeing.

2.1. What have the lockdowns taught us?

The lockdowns have taught us two major points about climate change and how to tackle it. First, it is still possible to make great and rapid positive changes to the anthropogenic effects of climate change, even if we do not continue with "lockdowns". As stated previously, the effects that the lockdowns had on air pollution 'in the 32-year history of intergovern-

mental climate policy, none of the attempts by any government or any international agreement has had such a drastic mitigating impact' (Chuan Loh, 2021, p.4428). COVID-19 serves as a practical lesson to the world that environmental degradation and climate change are still reversible and that it is possible to take drastic measures to achieve the Sustainable Development Goals (SDGs) for the long-term environmental health of the planet. The question is: can global environmental policy take climate change as seriously as COVID-19?

The second lesson COVID-19 has taught us is that despite the drastic attempts of "green growth" and "decoupling", unfortunately GHGs are still heavily coupled and integrated with GDP. 'This observation should further ignite the debate about whether consumption growth is compatible with limiting global warming and protecting the environment more generally, and whether technological progress can be fast enough to reduce the environmental impacts of that greater consumption' (Helm, 2020, p.24). World leaders prior to COVID-19 made claims that 'green growth' was working. When the US intended to withdraw from the Paris Agreement in 2017 (they could not formally submit their notice until 2019) in their America's Pledge Phase 1 Report in 2017, they stated that 'economic growth and GHG emissions in the U.S. are decoupling. Between 2005 and 2015, the U.S. economy grew by 15 per cent while net GHG emissions declined by 11.5 percent' (America's Pledge, 2017, p.15).

Theresa May, former Prime Minister in the UK, stated in 2019, 'We have made huge progress in growing our economy and the jobs market while slashing emissions.' Whilst both these quotes may be true, they are certainly not showing the full picture and have exaggerated how green the economies really are. The technological progress and decoupling that would need to occur to mitigate the effects of climate change is astronomical and not fast enough. If the US and the UK were on as good a track at 'slashing emissions' as they made out and growing green, then the anthropause during COVID-19 would not have been so dramatic for planetary health. The anthropause has revealed that developed nations are much further away from decoupling than they made out they were pre-COVID-19.

Furthermore, a rather ironic point: climate scientists have estimated that the Arctic Ocean will be free of ice by 2050. As the ice melts, 'ancient viruses and bacteria from the permafrost soils that are potentially harmful to human beings may be released. This could cause more outbreaks of infectious diseases' (Chuan Loh, 2021, p.4426). There is speculation that there are tens of thousands of carcasses with infectious diseases preserved in the frozen soil. If action is not taken, then there could be a series of lockdowns and pandemics due to the diseases that are released due to the ice melting. So, preemptive critical action should be taken now to halt the potential pandemics that will occur due to the melting of the ice and the

release of diseases, and unfortunately, a green growth solution is just too slow to do this.

3.1 The European Green Deal

The Von der Leyen Commission launched the European Green Deal (EGD) as its first political priority and a new growth strategy for Europe in December 2019. It became the 'first comprehensive plan to achieve sustainable development in any major world region' (Crnčec, Danijel, 2020, p.1116).

At the end of 2018, 'the Council and the Parliament agreed upon more ambitious EU 2030 energy targets than initially agreed by the European Council in 2014 (Crnčec, Danijel, 2020, p.1116), and simultaneously, the Commission set out its long-term strategy for achieving net-zero by 2050. The EGD proposed the European Climate Law, aimed to enshrine in law the EU's climate neutrality by 2050. Within the EGD is a green oath: 'Do No Significant Harm (DNSH Principle).' This means not supporting or carrying out any economic activity, investments or policies that do significant harm to any environmental objective.

In the very short term, the coronavirus dominated almost all political and administrative bandwidth, with understandably little time to pursue other environmental objectives. This is unlike previous economic crises such as the 2008/2009 economic crisis and the subsequent eurozone crises, which led to climate and environmental priorities being pushed down the agenda. The EU's response to the Coronavirus crisis only appeared to strengthen and expand the EGD, particularly the decarbonisation elements. External shocks and crises do not always have to have negative impacts on the capacity to drive climate regulation. Instead of the EGD being de-prioritised, the EGD became the recovery strategy for the EU post-COVID-19.

At the end of April, via a 'Marshall-Plan-type investment support' (Crnčec, Danijel, 2020, p.1111), the Commission circulated a roadmap for recovery which 'included a European Recovery Fund to be financed from the EU budget' (Crnčec, Danijel, 2020, p.1111). The EU's response to the pandemic allowed creating EU integration and an 'entrepreneurial role to design the policy framework and processes to pursue multiple policy goals' (Penca, 2023,p.2).

The creation of the Recovery and Resilience Facility (RRF) in response to the pandemic had six areas, three of which were attributed to the green transition. These were ' "Power up", "Renovate" and "Recharge and Refuel", which cover clean technologies and renewable energy, energy efficiency, and sustainable transport. Renewable energy (solar, wind, alternative energy) and hydrogen measures (Penca, 2023, p.6). The introduction of the RRF provided strong financial integration and leverage for the opportunity of less ambitious countries in regard to renewable energy to close the gap in their progress. Countries that were lagging behind, such as

Romania, Italy, Estonia and Poland, were allocated the highest funding for Hydrogen (Penca, 2023, p.6). The Commission also aligned the Member States' national preferences in its allocation with the EU's green recovery objectives. The COVID-19 crisis led to the best possible outcome for the EGD: the strengthening of existing policy trends in the long-term.

Conclusion

In conclusion, the anthropause during COVID-19 has led to positive effects on planetary health, policy responses with the EGD and uncovering to the public that world leaders have been misleading about where we are globally with decoupling GHGs from economic growth. This will put pressure on world leaders to either do more for technological advancements or change the strategy and understand that a degrowth solution, incorporating the lessons learnt from lockdowns, may be best suited in mitigating the effects of anthropogenic climate change to prevent future pandemics.

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