

# Transition from pandemic

The effects of the COVID-19 outbreak are unfolding rapidly and governments around the world are seeking scientific advice to respond. Sustainability communities should be part of the process but need to up their efforts to engage with policy needs.

COVID-19 has changed our lives. It has changed how scholars teach and how they do research, it has paused travelling for millions and ultimately it has altered how we interact with each other. Reduced car use and shut factories have brought cleaner air, and empty urban areas are now seeing wild animals roaming where they didn't dare before. The pandemic is also responsible for unprecedented amounts of waste from single-use medical protection equipment, and likely from perishable food piled in panic, for which new management strategies will be needed. It is showing how air pollution weakens people's immune systems and how carbon emissions can be cut overnight. Physical distancing measures to slow down virus transmission have revealed substantial social vulnerabilities and inequities — not all workers can safely do their job remotely and keep their income, some have to stay on the frontline facing risks, others simply lost their jobs. The inequities go much further. Many children in otherwise affordable education systems lack resources (for example, computers) to switch to home schooling, and even washing hands to fight the spread of the virus can be an impossible task where water is scarce. It is in troubled times like at present that society is most in need of an adequate provision of social services — public goods according to many — including accessible and reliable healthcare and care for the most vulnerable groups, like the elderly or the victims of abuse. But in too many countries around the world the reality is dire and far from ideal.

Against this backdrop, governments are taking actions that need guidance from the best scientific advice. The risks are that myopic and ill-based choices can have severe consequences for most citizens. Alongside other experts, sustainability scholars have much to offer. Pressurized to tackle the coming recession and high unemployment levels, governments might [roll back much needed environmental regulation and monitoring](#), resulting for example in the release of excess toxic pollutants or higher deforestation. People have changed their

behaviour at an unprecedented scale — such changes were hardly believable a few months back, despite decades of social sciences research informing policies and interventions on how to achieve it. Some of these changes will probably persist, because they will have made our life easier than before, such as the increased reliance on home deliveries or online interaction for certain purposes, like business and work meetings. Other changes might revert steadfastly and perhaps with more impetus, like travelling for leisure or consuming stuff as if there was no tomorrow. Deep reflection from a quiet time might lead some individuals to pledge to continue with the good things they have gained from a slow life, such as quality time with loved ones or the joy of natural contemplation. These might also enhance mental health affected by the lockdown.

The long-term effects are much less predictable. Increased online interaction and work flexibility could lead to cities' decompression and subsequent changes in urban sustainability, for example, in terms of transport and green spaces or public areas. Shocks to oil output and use might revolutionize industrial ecologies, by speeding up transition to renewable energies or metamorphosing production systems. Ripple effects on supply chains and the crude acknowledgement of the importance of safe provision of fundamental goods, such as food or healthcare equipment, might reshape businesses and international trade.

*Nature Sustainability* shares much debated views about the post-pandemic world and how different it will be, and urges sustainability communities to join forces to help transition from the tragic reality of the pandemic and all the social problems it has revealed into a much better future where individuals and institutions work together to enhance societal and natural well-being. Is this a utopian vision? We think it is not.

We look forward to seeing how scholars seize this opportunity and provide original and focused research with sustainability at its heart, while avoiding

its 'covidisation'. *Nature Sustainability* welcomes contributions offering evidence about the need of a healthy planet for human survival; innovative ideas on how research communities might rethink or reshape the questions they pose, what they do and how their recommendations can turn effective; analyses presenting evidence and viable strategies against opportunistic developments that could be detrimental for sustainability; technological solutions to reduce vulnerability, such as improving resilient access to water or renewable energy; or targeted guidance about how positive behavioural changes can last, to name just a few relevant research areas.

Importantly, academics and practitioners need to realize that as much as the pandemic is changing the course of humanity, the institutions societies rely on are still the same. So, as citizens, we must all hold governments to account, now more than ever. As to the research community, experts might continue to face the same barriers to make way into decision making unless researchers give genuine consideration to implementation and to shape their research agendas around specific, policy-relevant questions. Government advisors have sought answers to concrete questions, such as how long the virus lasts on surfaces, what the means of contagion are and how to design and develop respirators rapidly and with limited materials. Relevant research communities have moved swiftly to find answers that have fed directly into decision making — a complex exercise given contrasting political interests or the difficulty of reconciling recommendation from different experts. All at an unprecedented speed. It may be possible to imagine sustainability research evolving similarly to what the public health community is currently doing for example. Responses to this pandemic suggest that a better world is possible, but we need to embrace change to achieve it. □

Published online: 18 May 2020  
<https://doi.org/10.1038/s41893-020-0546-1>