

Climate Change and COVID-19: Is Working from Home Sustainable for the Environment?

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By Dr Vishal Rana, Lecturer, Australian Institute of Business.

By Dr Syed Mohyuddin, Discipline Leader and Senior Lecturer, Australian Institute of Business.

If there is any *silver lining* ([even if temporary](#)) regarding one of the biggest crises human civilisation has faced in recent times (COVID-19), it has been a positive impact on climate. The crisis has forced millions of knowledge workers to work from home. A knowledge worker, as defined by Peter Drucker in his book *The Landmarks of Tomorrow* (1959), is a high-level worker who applies theoretical and analytical knowledge, acquired through formal training, to develop products and services.

Working from home during Covid-19 has had a significant impact on the climate conditions in cities like Beijing (Image 1 below) and Los Angeles (Image 2 below). These and many other places in the world have witnessed less air pollution and clearer skies. Professor Kingham from the University of Canterbury in a [recent article](#) has discussed how people are staying home, driving less and taking fewer flights. The office executives who used to fly for business meetings have now realised that many of these meetings can be as effective through virtual tools as face to face.

A recent report by the United Nations suggested that before Covid-19, 2019 was the [second warmest year on record](#), and Carbon Dioxide (CO₂) levels and other [greenhouse gases](#) in the atmosphere rose to new records. With an unprecedented rise in the number of knowledge workers working from home during this pandemic, as directed by their employers and governments, the overall impact of this development may or may not work in the favour of climate change in the long run. While greenhouse gas emissions are projected to [drop about 6 percent](#) in 2020 due to travel bans and economic slowdowns, this improvement is likely to only last as long as the pandemic lasts.



Image 1- Source: [Beijing during and before Covid-19.](#)



Image 2- Source: [Los Angeles before and during Covid-19.](#)

Yet, many people believe that there is [no silver lining](#) and the [COVID-19](#) pandemic [won't slow climate change](#). In a [recent article by Meredith Turits](#), she presented some thought-provoking reasons as to why the impact of working from home on climate change may not be that simple. She argues that working from home in different parts of the world will only be environmentally friendly during certain seasons. For example, she found that the environmental impact of remote work was higher in the winter due to the need to heat individual workers' buildings versus one office building.

Kenneth Gillingham, Associate Professor of Environment and Energy at the Yale School of Forestry and Environmental Studies has argued that [air-conditioning generally consumes more energy than heating](#), which means that cooling individual homes have a more negative impact on the environment than heating each home. The article went further on to suggest that as different countries of the world derive their energy from different sources, some are more sustainable than others, such as hydro power (clean) compared to coal power (dirty). This suggests that if sustainability is the future of the planet, then the remote jobs that seem like the future of work may not actually be the case, and workers may in fact end up back in their old offices.

However, Meredith didn't consider the other aspects/benefits to the environment due to working from home and evident during the pandemic. Lockdowns have pushed global [electricity demand down by 20 percent](#), the biggest drop since the Great Depression of the 1930's. In response to tackling Climate Change post-COVID, the United Nations Secretary-General recently proposed [six positive-climate actions](#) for governments to take once they go about building back their economies and societies.

However, with regards to knowledge workers who have been stuck in their homes for much of this year, one of the questions is whether they would all like to go back to their workplaces or will they prefer to work from home in the future. According to one [study](#), employees working remotely work 1.4 more days per month than their office-based counterparts, resulting in more than three additional weeks of work per year. Another [study](#) found that working from home increased productivity by 47% during this pandemic.

However, the [downside](#) to these impressive productivity figures has been the [mental health of employees](#). A [study of 2500 remote employees](#) found that 19 percent of employees struggled with loneliness, 22 percent found it difficult to unplug themselves after work, and 8 percent struggled to be motivated. This does raise [performance management](#) and [organisation culture issues](#) for employers, balancing the costs vs the benefits when it comes to remote work.

One thing is almost certain, Covid-19 has changed the attitudes of many people towards climate change because they can see for themselves the differences between before the lockdown and after. As more people have had to work from home during the lockdown, they have been more able to [explore nature in their immediate surroundings](#). Studies have shown in the past that when people are more exposed to the natural world, they are more likely to [engage in pro-environmental behaviours](#) such as planting trees, and an [increase in the feeling of awe](#) towards Nature which is good for their mental health.

It is yet to be seen whether this mass experiment of working from home is sustainable in the long run or not. Only time will tell.



Vishal Rana

Lecturer, Australian Institute of Business

Dr Rana is a Lecturer in Management. His area of interest is in The Future of Work through Work Design, Organisational Behaviour, Business Ethics and Exponential Technologies. He is a passionate educator who has received Excellence in Learning and Teaching Awards from Dean, Learning and Teaching and Teaching Commendation from Deputy Vice Chancellor (Academic) at Griffith University.



Syed Mohyuddin

Discipline Leader, Australian Institute of Business

Syed is a senior lecturer at AIB. He holds a PhD in Management from Curtin Business School, Curtin University, Perth (Western Australia). He has over ten years' experience teaching human resources and management courses in various universities. His PhD research work was related to the challenges faced by skilled migrants to achieve professional recognition in Australian organisations.