

A circular economy could save the world's economy post-COVID-19

12 October 2020, by Alice Scott

The World's economy is feeling the effects of the COVID-19 pandemic with many industries under threat. A group of researchers from the UK, Malaysia, Nigeria, UAE and Japan, led by WMG, University of Warwick have concluded that adopting circular economy strategies would be the best way for the world's economy to recover, whilst enabling the transition to a low-carbon economy.

The World Health Organisation declared the COVID-19 pandemic on the 11th March 2020, which saw [global supply chains](#) severely disrupted and strained, and the [financial market](#) unsettled, resulting in a cross-border [economic disaster](#). Lockdowns and border closures shattered the core sustaining pillars of modern world economies, with the economic shock due to these measures still being weighed across the globe.

In the paper, "A critical analysis of the impacts of COVID-19 on the [global economy](#) and ecosystems and opportunities for circular [economy](#) strategies," published in the journal *Resources, Conservation and Recycling*, sees a group of researchers led by WMG, at the University of Warwick, critically analysed the negative and positive impacts of the pandemic. To make the world resilient post-COVID-19, the adoption of circular economy framework is recommended for all sectors.

The pandemic had many effects on everyone's lives, from not leaving the house, being infected and possibly hospitalised, and even losing a loved one. It has had a strain on those who were furloughed or even lost their jobs, and the mental health of the populace. Economically, the effects can be felt everywhere due to the colossal financial loss across both the macro and micro levels of the economy, including the global supply chains and international trade, tourism and aviation and many other sectors, hampering the attainment of the United Nations Sustainable Development Goals. However, the pandemic has provoked some natural changes in behaviour and attitudes with

positive influences on human health and the planet including:

Improvements of air quality, in fact in the UK it's thought more lives have been saved by the reduced air pollutants compared to the number of people who died with COVID-19 in China, for example.

- Reduction in environmental noise and traffic congestions has led to an increase in the number of people exercising outside to enjoy the atmosphere.
- Less tourism induced by the pandemic, resulting in less exploitation of the beaches, leading to increased cleanliness.
- Decline in global primary energy use. For instance coal use was down 8%, 60% less oil, and electricity plummeted by 20% compared to the first quarter of 2019, leading to record low global CO₂ emissions.
- Triggering the need for diversification and circularity of supply chains, and evinced the power of public policy for tackling urgent socio-[economic crises](#).

The researchers have examined the impacts of the pandemic and its interplay with circular economy, to evaluate how it could be embraced to rebuild the world's economy.

Dr. Taofeeq Ibn-Mohammed, from WMG, University of Warwick says, "The pandemic has highlighted the environmental folly of 'extract, produce, use and dump' economic model of material and energy flows, however the short term resolutions to cope with [pandemic](#) will not be sustainable in the long-run, as they do not reflect improvements in economic structures of the global economy.

"We therefore propose circular economy adoptions for all industries, with different strategies for each one. For example, embracing the transformative capabilities of digital technologies for supply chain

resilience by leveraging: [big data analytics](#) for streamlining supplier selection processes; cloud computing to facilitate and manage supplier relationships; and Internet of Things for enhancing logistics and shipping processes.

"The post-COVID-19 investments needed to accelerate towards more resilient, low carbon and circular economies should also be integrated into the stimulus packages for economic recovery being promised by governments, since the shortcomings in the dominant linear economic model are now recognised and the gaps to be closed are known."

More information: T. Ibn-Mohammed et al. A critical analysis of the impacts of COVID-19 on the global economy and ecosystems and opportunities for circular economy strategies, *Resources, Conservation and Recycling* (2020). DOI: [10.1016/j.resconrec.2020.105169](https://doi.org/10.1016/j.resconrec.2020.105169)

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