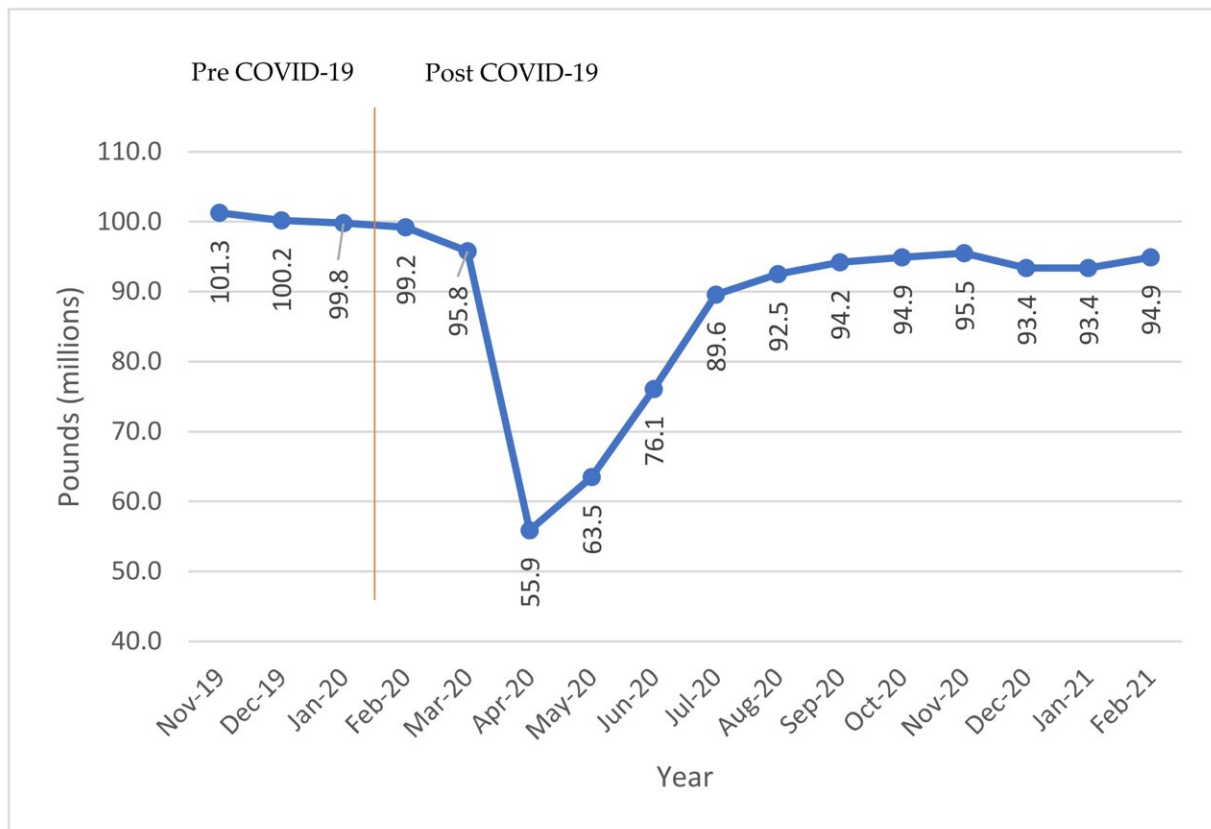


Economic sustainability in the construction sector

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Construction output of the U.K. Credit: *Sustainability* (2022). DOI: 10.3390/su14106326

Leading world markets face similar problems in creating economically and environmentally sustainable construction industries, international

researchers say in a new research article.

As China, the U.S., Australia and other countries struggle to maintain construction industry stability, a new assessment published in *Sustainability* and led by Malaysia's Universiti Teknologi Petronas Civil and Environmental Engineering experts, with Flinders University, recommends fundamental changes to improve short-term and long-term viability.

A more [sustainable approach](#) to construction will tackle urgent environmental imperatives and, in the long run, stabilize major advanced economies to regular construction industry "shocks"—as seen around the world this year, says Flinders University researcher Muhammad Ali Rabbani, who is based in Pakistan.

With construction forming a major plank of the developed economies of China, the U.S. and U.K., the research calls for:

- Immediate action to halve fossil fuel emissions and improve [production processes](#) in design and recycling and energy efficiencies to help tackle the climate crisis;
- Government and private sector policies and incentives to reskill and upskill labor and introduce new technologies in the post-COVID-19 period to meet shortage and reduce the cost of construction;
- Find novel solutions to global material shortages including recycling, sourcing [raw materials](#) more sustainably, and using resources more efficiently; and
- More control over bank lending, capital funding and wage policies within the construction sectors.

Of the three regions, the research modeling concludes that the U.S. will become a leader in taking advantage of a more sustainable circular

economy to rebound from current aftershocks to become a solid economic contributor to GDP.

And while construction accounts for almost 7% of China's GDP and up to 16% of the U.K.'s economy, researchers warn the industry can lead to [economic recession](#) and increases in [environmental degradation](#) unless new measures are taken to create more [sustainable development](#) in future.

More information: Wesam Salah Alaloul et al, Assessment of Economic Sustainability in the Construction Sector: Evidence from Three Developed Countries (the USA, China, and the UK), *Sustainability* (2022). [DOI: 10.3390/su14106326](https://doi.org/10.3390/su14106326)

Provided by Flinders University

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