

20 – Impacts of Carbon Pricing Under Covid-19 in China

Xiang-Yu Wang, Chang-jing Ji, Mikael

China is the world's largest carbon emitter, and has been actively responding to climate change and emissions reduction by exploring various carbon pricing policies, such as the upcoming national carbon market and possible carbon tax in the future. The COVID-19 has a profound impact on economic production and energy use. This study applies the Computable General Equilibrium Analysis to describe the economic impact and emissions impact of different carbon pricing levels under the epidemic with C3IAM/CEEPA model. Research shows that, affected by the epidemic, China's GDP will drop by 3.73%-5.83% in 2020, and carbon emissions will fall by 4.23%-6.87%. If the power sector is further regulated with carbon pricing of 50-100 yuan/ton, GDP loss will increase by 0.02%-0.06%, and emissions will decrease by 0.05%-0.09%. The coal, construction, and transportation sectors have been greatly affected by the epidemic. The rebound in labor supply and consumption levels can greatly reduce the economic losses of these sectors.

Biographical note

Xiang-Yu Wang, aged 26, is a PhD candidate of Center for Energy & Environmental Policy Research in Beijing Institute of Technology and visiting student in Aarhus University, focusing on market-based instruments and environmental policy.