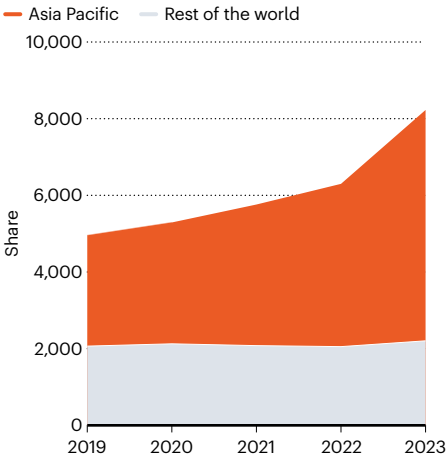


Patchy progress

There have been significant rises in Nature Index output for research related to affordable and clean energy in the past few years, but this has not been a global trend. **Data analysis by Aayush Kagathra. Infographic by Simon Baker, Bec Crew and Tanner Maxwell.**

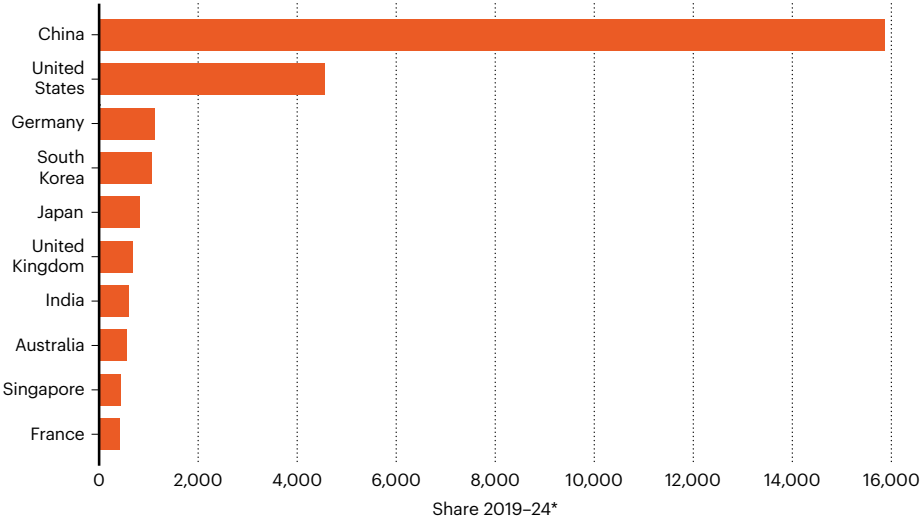
DIVERGING FOCUS

Global research output in the Nature Index related to affordable and clean energy has rapidly increased in the past few years, but not in every region. Countries and territories in Asia Pacific, for instance, doubled their Share from 2019 to 2023, but output in the rest of the world remained static.



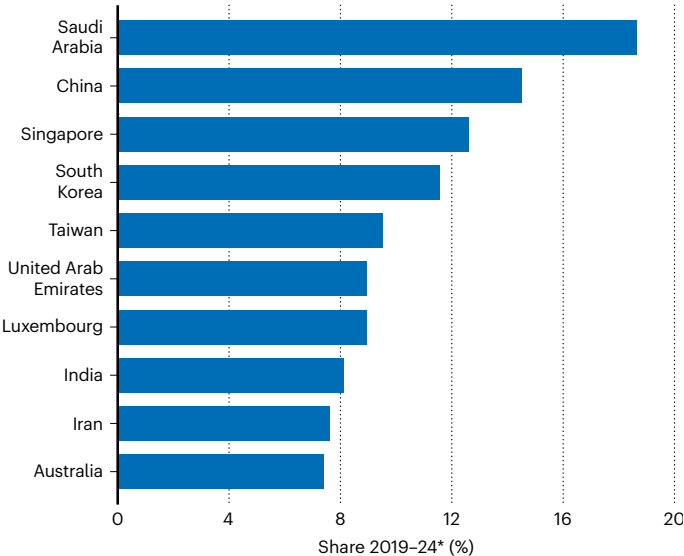
RACING AHEAD

China's Nature Index output in clean-energy research from 2019 to 2024* dwarfs that of other leading nations on this topic. Its Share across the period was more than three times higher than the United States, while the rest of the top 10 combined achieved a Share below 6,000.



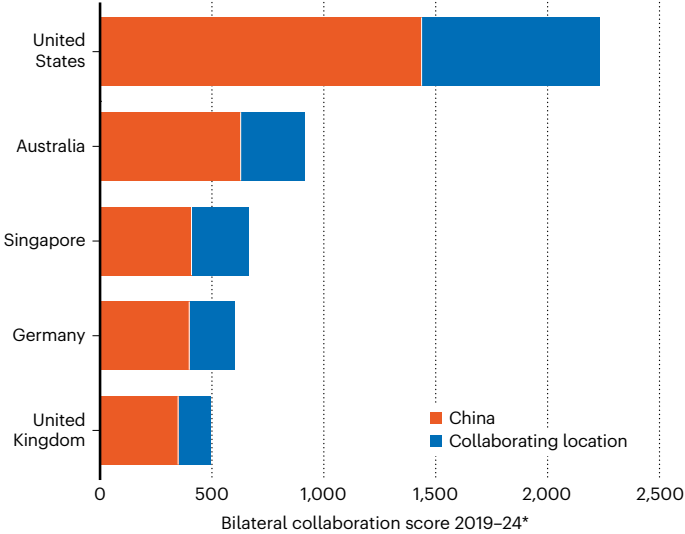
RESEARCH CONCENTRATION

Among the leading 40 locations for clean-energy research in the Nature Index, these are the 10 with the heaviest concentration of such research as a proportion of all their output. Some are geographically small in size, which might have influenced the figures, but others have a clear focus on this technology.



POWER COUPLINGS

China features in seven out of ten of the leading bilateral research partnerships for clean-energy research, and the top five pairs all include the country. Although collaboration between the United States and China produces the highest output, partnerships involving Australia and Singapore are not far behind despite these countries having much lower populations.



*Data for 2024 represent the period January–August 2024