

China's Progress Towards Sustainability

2018 marks the 40th anniversary of China's reform and opening up. Here we have conducted spatial and statistical analyses of big statistical and survey data on China's socio-economic development and emissions for forty years, and had large-scale overviews of China's environmental performance as well as attempts to analyze decoupling. In our analysis, China has taken a "small step but fast run" rather than a "shock therapy" approach, with new policies or programs first demonstrated at small scale, and then incrementally spread to the whole country. With this approach China has achieved great social and economic progress which is recognized globally. However, economic prosperity has brought China great resource and environmental challenges, whilst not eliminating regional inconsistencies, rural-urban economic divergence, and social inequity, and the impacts even go beyond the territory of China. China's development has for a long time been coupled with environmental emissions, but recent years it came to a turning point for decoupling, except for CO₂ emission which has shown a strong coupling with economic development. Policies to limit and manage environmental pressures and impacts have been crucial in the process of transformation. Even though China has chosen sustainable development as a national strategy to achieve ecological civilization, there is still a long way to go towards achieving delivery of the UN Sustainable Development Goals in terms of urban-rural balance, regional parity, and social equity. China's success over last 40 years has provided insights to other countries, especially emerging and developing economies.