

Role of innovation during the process of low-carbon transition at the city level: a case study of Zhenjiang

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Abstract: This paper examines the role of innovation during the process of low-carbon transition at the city level. It addresses the case study of Zhenjiang, focusing on the lessons and successful experiences of Zhenjiang city. According to our empirical analysis of panel data from Zhenjiang, innovation (by data of patents and R&D investment) is significantly positively correlated with human capital accumulation and regional carbon productivity. Our introduction of an interaction term for innovation and human capital accumulation increases the possibility of investing in public education to enhance local human capital and regional carbon productivity. The government should utilize the innovation policy to increase investment in R&D to enhance local human capital and regional carbon productivity.

Keywords: innovation; R&D investment; human capital accumulation; low-carbon transition

By 2050 it is projected that approximately 64% of the developing world and 86% of the developed world will have residencies in urban areas.

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