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## **LOW-CARBON CITY PILOT POLICIES AND ENTERPRISE POLLUTION EMISSIONS: EVIDENCE FROM CHINA**

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### **Abstract**

Under the pressure of global climate governance and the constraints of China’s carbon peaking and carbon neutrality goals, China is exploring the path of green transformation through low-carbon city pilot policies, aiming to provide a scientific basis for improving the environmental governance system. Taking the low-carbon city pilot policy (LCCPP) as a quasi-natural experiment, the paper constructs a multi-period difference-in-differences model, using Chinese industrial enterprises data from 2007-2013 to systematically investigate the effect of the low-carbon city transformation on the pollution emission intensity of enterprises (PEIE) and the mechanisms. The results show that LCCPP significantly reduces PEIE, with enterprises’ pollution emission intensity in low-carbon pilot cities decreasing by about 9.98% on average compared with that in non-low-carbon pilot cities; through a set of robustness tests, the findings still hold. Heterogeneity analysis indicates that this impact is mainly in the subsample of foreign-owned, private, and non-exporting enterprises and the enterprises of highly polluting, and non-capital-intensive industries. The mechanism analysis suggests that the LCCPP reduces PEIE through the environmental investment effect and the technological progress effect. The study provides policy suggestions for improving the ecological behaviours of enterprises through the transformation of low-carbon cities.

*Key words:* environmental investment effect, low-carbon city pilot policy, pollution emission intensity of enterprises, technological progress effect

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