

# Study on the Impact of Green Credit on Carbon Emissions in Highly Polluting Industries

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#### Abstract

Over the past 40 years since reform and opening up, China's economy and society have developed vigorously, and it has now become the world's second largest market economy. However, the extensive growth model of traditional economy only ignoring the growth quality has caused great damage to China's ecological environment. As an important source of environmental problems, especially highly polluting enterprises, the negative externality of their production and operation on the environment seriously restricts the sustainable development of China's economy. The use of credit tools to reduce pollution and carbon reduction is the core topic in the field of micro finance research in recent years, which is of great significance to reasonably guiding the green upgrading of China's industrial structure and the realization of carbon peak and carbon neutral development goals. Considering the spatial properties of carbon dioxide and greenhouse gases, this paper adopts the method of spatial measurement to study the effect of green credit on the pollution reduction and carbon reduction effect of highly polluting enterprises. The results show that: First, the development of green credit has a positive impact on the pollution reduction and carbon reduction of high-pollution enterprises. Second, energy consumption and green input are the ways for green credit to affect the pollution reduction of highly polluting enterprises. Third, from the perspective of heterogeneity results, the emission reduction effect of green credit tools is more obvious in areas with low pollution level and less regional development pressure, which indicates that the function of green credit is not sufficient and its universality still needs to be improved. Based on this, we should consolidate the effect of green credit emission reduction, improve the reward and punishment measures, and actively develop green credit.

### **Keywords**

Green-credit Policy, Reduce Pollution and Reduce Carbon Effect, Space Measurement