

Digital Consumption and Green Economic Efficiency: Evidence from China's National Information Consumption Pilot Program

Xiaohan Liu*

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

Email address:

1194572937@qq.com (Xiaohan Liu)

*Corresponding author

Abstract

Implementing the digital consumption strategy to expand domestic demand is of significant importance for promoting the green transformation of the economy and achieving high-quality development. Using the national information consumption pilot policy as a quasi-natural experiment, this study employs panel data from 280 prefecture-level cities in China from 2011 to 2022 and applies a difference-in-differences (DID) model to empirically examine the impact, mechanisms, and heterogeneity of digital consumption on green economic efficiency. The findings indicate that digital consumption significantly enhances green economic efficiency, primarily through three channels: elevating informatization levels, accelerating marketization processes, and increasing public environmental awareness. Moreover, government attention positively moderates the effect of digital consumption on green economic efficiency. Heterogeneity analysis reveals that the promoting effect of digital consumption on green economic efficiency is more pronounced in non-resource-based cities, environmentally key protected cities, and eastern regions. This study provides policy insights for deepening the integration of digital technology and the green economy, improving market mechanisms and public participation systems, and optimizing government governance and regional coordination mechanisms. It contributes to fostering the vigorous development of the green economy in the context of the digital economy and supports high-quality, sustainable economic growth.

Keywords

Digital Consumption, National Information Consumption Pilot, Green Economic Efficiency