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Developing the Circular Economy in China: Challenges and Opportunities for Achieving “Leapfrog Development”

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Abstract

China is pioneering a new sustainable development model which has the ability to overcome current environmental and resource management problems, while achieving improvements in resource productivity and eco-efficiency. This model, formally accepted in 2002 and termed the “circular economy”, is understood to mean the realization of a closed-loop of materials flow in the Chinese economic system. Successful implementation of this model is seen as one way China can “leapfrog” past the environmental damages typically seen as economies industrialize. This paper introduces the development of the model in China, and presents the current situation of circular economy practice in China. The main focus of this paper is to describe current measures being implemented by decision-makers in China for the long-term promotion of a circular economy, including the formulation of objectives, legislation, policies and measures, so that the country can ‘leapfrog’ its way from environmentally-damaging development to a more sustainable path. The paper then identifies a series of barriers and challenges to the implementation of the concept in China. Finally, several conclusions about the future of the circular economy concept are drawn. Data were derived primarily from an analysis of secondary sources (i.e. previously published Chinese and English papers). Additional primary data derived from the main author’s personal involvement in several circular economy initiatives were also employed.