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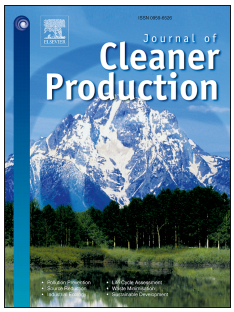

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Inventory, environmental impact, and economic burden of GHG emission at the city level: case study of Jinan, China

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ABSTRACT

To understand greenhouse gas (GHG) emission at the city level and establish effective measures to achieve carbon reduction, we conducted an inventory of GHG emission and its environmental and economic impacts on Jinan City by using a hybrid life cycle assessment (LCA) method. We quantified the GHG emission in Jinan in the past 11 years and evaluated the spatial environmental potential of the energy consumption and industrial process in 2015. The inventory included direct emission of scope 1 (agriculture, land use, industry, municipal solid waste disposal, and energy consumption), and indirect emission of scopes 2 and 3, including emissions from the