**1. Introduction**

Since China’s reform and opening up started in <give the year>, China’s annual economic growth rate has reached more than 9%, but at the same time the amount of many environmental pollutants, such as SO2 and CO2, in China has increased. Because of the environmental problems, some mass disturbances have occurred in China, such as the Fujian Tingjiang Pollution Event and the Guangxi Longjiang Cadmium Pollution Event. The international community began to criticize China about the environmental damage, resulting in more carbon tariffs being imposed on Chinese exports. But has the increase of the Chinese economy really hampered the control of pollution? How are these two factors related? To answer these questions, we need a systematic and scientific measurement method (Müller-Fürstenberger and Wagner, 2007). Many measurement results show that economic growth and environmental pollution have an inverted U-shaped relationship, which is commonly called the Environmental Kuznets Curve (EKC). EKC indicates that at the beginning, the environmental pollution will increase with the increase of the per capita income level but when it achieves a critical value, the environmental pollution will decrease as per capita income level continues to increase. Whether economic development ultimately results in worse environmental pollution or improves the environment is the vital topic in the application of EKC (Dina, 2004). Recently, an increasing number of scholars have studied whether or not the EKC phenomenon exists in China. The Environmental Kuznets Curve hypothesis has many important economic implications. For example, environmental pollution increases during economic growth, which indicates that economic growth is harmful to the environment.