

Effect of guiding policy on urban residents' behavior to use recycled water

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ABSTRACT

At present, the promotion policy for the reuse of recycled water adopted in China gives priority to mandatory administrative orders but ignores the policy guidance for residents' behavior to use recycled water. Based on the above practical problems, this research combines the characteristics of recycled water reuse, then reduces the behavior guiding policy for the potential use of recycled water to environmental motivation stimulating policy, demonstration guiding policy, and combined with the mechanisms of different policies, the extreme shortage of water resources, the promotion degree of regional recycled water reuse, and the reuse of recycled water in a natural environment are selected as the abstract indicators of environmental motivation stimulating policy, demonstration guiding policy, and knowledge popularization policy. The above indicators are taken as control variables, and control groups are set to simulate the mechanisms of different policies. The residents' willingness to accept the reuse of recycled water is taken as a dependent variable, and a structural equation model is used for a variance analysis of data between different control groups. Finally, it is verified under the natural state that the three types of policies have a significant guiding effect on the reuse of recycled water.

Keywords: Recycled water reuse; Behavior guiding policy; Stratified sampling; Structural equation modeling

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