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TITLE: WATER USE IN THE JAPAN ECONOMY IN 2000: AN INPUT-OUTPUT APPROACH

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ABSTRACT:

The objective of this paper is to demonstrate a comprehensive study of the structural relationships between Japan's economy and fresh water resources, which is one of the most important environmental variables for sustainable development. To that end, we employ the concepts and indicators derived from input-output analysis. We also extend a fresh water use database to input-output table in order to identify the water usage of each industrial sector and its fresh water coefficient. This database has the quantity information of each industrial sector's water channel uses such as waterworks and industrial water. Fresh water coefficients for each industry is calculated by this database and used to estimate the fresh water consumption in the inducement effects, which are calculated by the Leontief Inverse. The information obtained provides a sound basis for the design of improvements within environmental policy.