

## **Assessing the economic and environment impacts of mitigating water consumption and pollution strategies with an input-output model in Beijing, China**

Topic: Input-output analysis for policy making 5

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This study is the first to apply a water conservancy input-occupancy-output (WCIOO) model linking economic and ecological systems in order to analyze water consumption and waste discharge and find mitigate water scarcity strategies in Beijing, China. Within WCIOO framework, a series of assessment indicators were calculated to assist in tracking both direct and total effects of freshwater consumption and waste water discharge in the economic sector, as well as to distinguish the economic sectors that have greatest influence on water demand and pollution. Assessment results indicate that water consumption and pollution can be reduced by readjusting the structure of production, consumption and trade in the Beijing. Finally different mitigating water consumption and pollution strategies in Beijing were assessed in different scenarios. Policy suggestions to mitigate water scarcity in the region were provided.