

Water and carbon nexus in China's Electricity Production and Distribution Sector

Topic: Input-output analysis for policy making IV

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China's Electricity Production and Distribution Sector used half of the industrial water consumptions and discharged nearly half of the carbon dioxides directly. The central government have proposed several policies which focused on the mitigations of water consumption and carbon emission by means as changing technology shares, but policies that focused on the formers may have positive and negative effects on carbon emissions inside Electricity Sector, and vice visa. What's more, as a key sector in China's economy, changes of technology shares inside Electricity Sector would have great impacts for the whole society. In this article, with the adoption of a disaggregated IO table, we used the method of multiplier analysis to analyze water consumption and carbon emission alterations in the whole economy induced by changes of technology shares. We would set different scenarios according to different policies, then after a comparison of different results induced by scenarios, we would try to figure out an optimized scenario that can not only satisfy the final demands of the whole society but also reduce water consumption and carbon emission mostly.