Water Consumption Reduction Strategies for Recycled Paper Mills

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Pulp and paper manufacture is one of the main consumer of fresh water and a significant contributor of environmental pollution. Water consumption reduction can play a role to shift to sustainable products in the paper making mills. This study was designed to supply a strategic model for determining the main factors affecting the water consumption in recycled paper manufacturing companies using analytic hierarchy process (AHP). Using a literature review and field study, the proposal model can provide a framework for water reduction in different sectors of recycled paper mills in Iran. The results show that the product gives higher priority between 6 criteria and the type of product gives higher priority between 30 sub-criteria. The results can considerably help the decision makers in the companies to have a more intended and prioritized decision in water consumption reduction. ACKNOWLEDGEMENT) This work was supported by the Korea Science and Engineering Foundation (KOSEF) grant funded by the Korea government (MEST) (KRF-2009-0076129) and funded by Seoul R&BD Program (CS070160).