



RESOURCE

Barriers in Implementation of Wastewater Reuse: Identifying the Way Forward in Closing the Loop

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Description / Abstract

The business case for circular economy in water management perspective has gained relevance in the recent times. By 2030, it is estimated that 160% of global total available water will be required to satisfy demand of anthropogenic-related activities and increasing waste-related water will be produced. Gaps on the conceptual framing of water reuse within supply chain management are clearly emerging and the demand for decision support systems helping at assessing effective water consumption in industrial setting is pressing. Despite the numerous local initiatives towards wastewater resource usage, barriers remain for its implementation in practice. Through a systematic review of previous studies in this field, the barriers towards the uptake of wastewater use in agriculture were classified according to the PESTEL (political, economic, social, technological, environmental and legal) framework. Alongside political and legal support, it is identified that for an economically and environmentally sustainable scheme for incentivising the deployment of feasible technologies, there is also a need to gain acceptance for wastewater usage in society in order to enhance the deployment of existing technological solutions. Addressing these factors in tandem can aid the development towards a circular economy for wastewater.

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