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Urine: the liquid gold of wastewater

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Graphical Abstract



Abstract

Urine is a valuable "waste" stream that could potentially be used to off-set the need to mine and produce synthetic fertilizers. There is an urgent need for new sources of key nutrients, including nitrogen, phosphorus and potassium, whereby we recycle and reuse these natural nutrients. Urine can be collected using novel no-mix toilets or nutrient recovery urinals, where nutrients are collected and treated on-site for subsequent recovery at resource recovery plants. Issues around scaling of pipes can be avoided by allowing fertilizers to form in removable collection tanks, thus creating a significant paradigm shift in how we currently deal with our "waste".

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