Creating a Circular Economy Precinct

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Why did we select this research?

This report aims to assist Sydney Water (SW) with both internal and external dialogue on the potential of creating a circular economy precinct in Sydney including organics processing from wastewater and additional organics waste streams. This report can be used to set the grounds, or be an inspiration and guiding line for similar projects in other ares of the world.

Key findings:

- Smart cities maximize social and environmental capital in the competitiveness of urban areas using modern infrastructure, highly efficient resource management and active citizen participation.
- The more costly it is to move a flow (losses, expense around transport) and the more spatially ubiquitous that flow is (e.g. energy and water in form of sunlight and rain), the higher the priority for that flow locally.
- The design approach of circular precincts therefore aims to reduce the volumes of local flows (demand-side management), find local supply synergies (heat cascades, material cascades) and supply of local flows in a renewable fashion.

Reference:

Jazbec, M., and Turner, A., 2018 Creating a circular economy precinct, report prepared by the Institute for Sustainable Futures, University of Technology Sydney, for Sydney Water