

# RISN Resource Innovation and Solutions Network

Reimagine Phoenix  
Transforming Trash Into Resources



**Reimagine**  
the future of Phoenix region  
when we all lessen our impact,  
use resources more wisely,  
and support a beautiful,  
more sustainable future.

**ASU** SCHOOL of SUSTAINABILITY

ARIZONA STATE UNIVERSITY

<sup>i</sup> Ross, A. (2011). *Bird on Fire: Lessons from the World's Least Sustainable City*. Oxford University Press.

<sup>ii</sup> Reimagine Phoenix. (2014). Retrieved from <https://www.phoenix.gov/publicworks/reimagine>

# Creating a Circular Economy for Green Organics

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## CURRENT STATE ANALYSIS

Municipal Solid Waste is at the forefront of the sustainability movement of the 21<sup>st</sup> century. Sadly, our unsustainable Phoenix has been the topic of books detailing urban sprawl, poor air quality, and poor water management.<sup>i</sup> Added to the list, the Phoenix-Metro region has growing environmental concerns of landfilling, such as methane gas emissions, which led to a rigorous goal to divert 40% from landfills by 2020 as part of the Reimagine Phoenix Initiative.<sup>ii</sup>

For solutions, many cities and states are considering the economic, environmental, and social impacts of feedstock aggregation and a circular economy.

Our focus is on the waste streams of "residential green organics" to analyze the benefits, best practices, and challenges involved with green organic waste and a circular economy. This data will support

states and cities in the development and successful implementation of related policies.

### Waste Characterization Study

- Single-family homes curbside pick-up and individual resident drop-offs
- 40-50% of the contents in trash and recycle bins are compostable materials
- Green organics include yard waste - grass and trimmings from trees and shrubs).
- If all compostable materials are diverted from the waste stream then Phoenix would meet its diversion goals.
- "Tan Can" pilot study for green organics collection (no food scraps) in some areas.



### Add Food Waste Collection

Collecting food waste will increase landfill diversion rates and increase the quality of the compost products.



