Sustainable Cities Network

August 14, 2019
Ground Breaking Ceremony 12/4/17

Soft Opening 9/26/18

Grand Opening 10/17/18
Since opening...

- 370,000 Pounds at Intake
- 6,506 Resident Drop-Offs
- 153,000 Pounds Shipped
Since opening...

- 700+ Residents Utilizing Swap Shop
- 29% Of Materials to Swap Shop
- 2 Large Paint Donations
April Customer Survey Results

350+ Responses

“Thank you for the convenience of year-round drop-off!”

“Great Service! Helps keep our City clean. I like the store!”

“Thank you for being there! You make Mesa better!!”

“This is a great facility that far meets the needs of the local community, thanks!!”

“This is an important service to the community. Thank you for putting it in place!”
Food to Energy?
Renewable Natural Gas (RNG)

- Biomethane – CH$_4$

- Variety of end uses:
  - Transportation fuel
  - Heating value
  - Electricity generation

- Utilizes existing CNG infrastructure

- 70% to 300% reduction in Green House Gases (GHG) compared to diesel
• City of Mesa Water Treatment Facilities will produce an estimated **150,000 MMBtu** of biogas annually*.

• City of Mesa refuse trucks use approximately **70,000 MMBtu** of CNG annually.

• City of Mesa refuse trucks collected an estimated **90,000 tons of food waste** in 2018.

*After Greenfield expansion*
Business

• Bashas
• United Food Bank
• East Valley Institute of Technology
  • Culinary School
  • Bistro
• Carson Junior High School
• ASU Memorial Union
• City of Tempe FOG Cooperative
Collection
Pre-processing Facility
Processing
Anaerobic Digestion
Project Status

• Technical
  • Bench-scale digesters soured
  • Biomethane specs

• Operational
  • Mesa has enough food waste available for collection
  • Pre-processing facility
  • NWWRP Co-Digestion Capabilities
  • Biogas Upgrading

• Financial
  • Renewable Fuel Standard and Renewable Identification Number credit challenges
  • Can food waste be collected at a competitive rate?
Sustainable Cities Network

August 14, 2019