

# Reclaiming Energy from Food Waste



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## Problem



**Too much Food Waste**

Food waste trash can [Image]. (2010, April 6). Retrieved from <http://i3.mirror.co.uk/incoming/article123341.ece/alternates/s2197/food-waste-pic-getty-images-245448043.jpg>



**No effective use for food waste**

Don't waste food [Image]. (2012, August 8). Retrieved from [http://www.foodnavigator-usa.com/var/plain\\_site/storage/7251137-1-eng-GB/US-wastes-40-of-its-food-production-finds-NRDC\\_strict\\_xxl.jpg](http://www.foodnavigator-usa.com/var/plain_site/storage/7251137-1-eng-GB/US-wastes-40-of-its-food-production-finds-NRDC_strict_xxl.jpg)

## Solution

### Collection

Integration of third bin

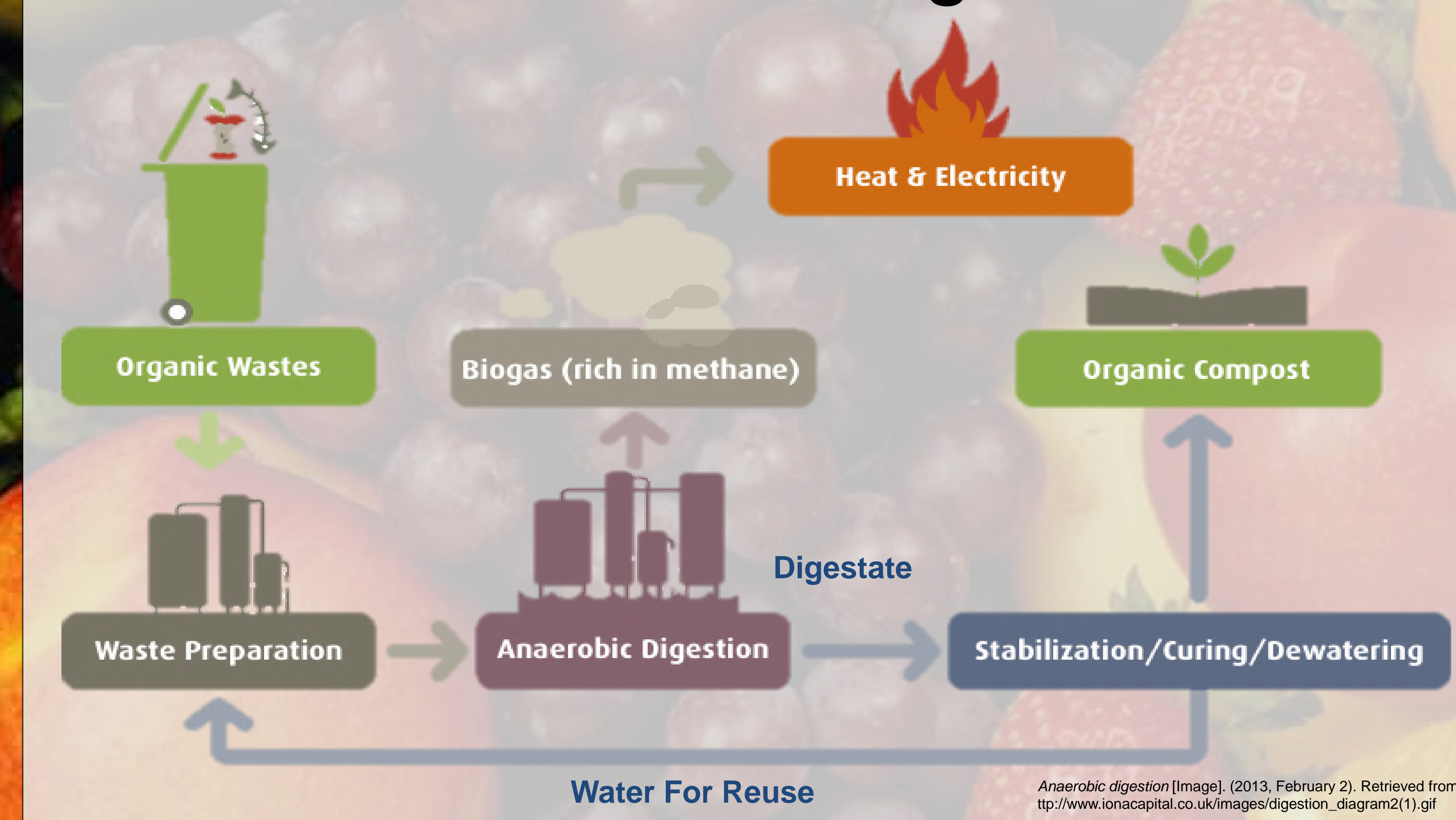


Removes food from waste stream

## Assessment Plan

- Track food waste entering landfills
- Assess pollution from landfills
- Measure Increase in yields
- Test nutrients in pasture soil
- Production of methane

## Processing



- ## Cost
- High start up costs
  - Public resistance
  - Third garbage truck to collect food waste
  - Processing cost
  - Convincing farmers to utilize compost

## Benefits

- Less food deposited in landfills
- Reduced use of synthetic chemical fertilizers
- Nutrient enrichment of grazing land
- Controlled production of methane gas
- Recycling of resources put into food production

## Current Problem Statistics in US

- 34 million tons of food wasted per year
- Accelerated global warming by methane produced in landfills
- More than 25% of yearly freshwater consumption
- \$165 Billion ends up in landfills
- 1 in 7 American households are food insecure

## Products



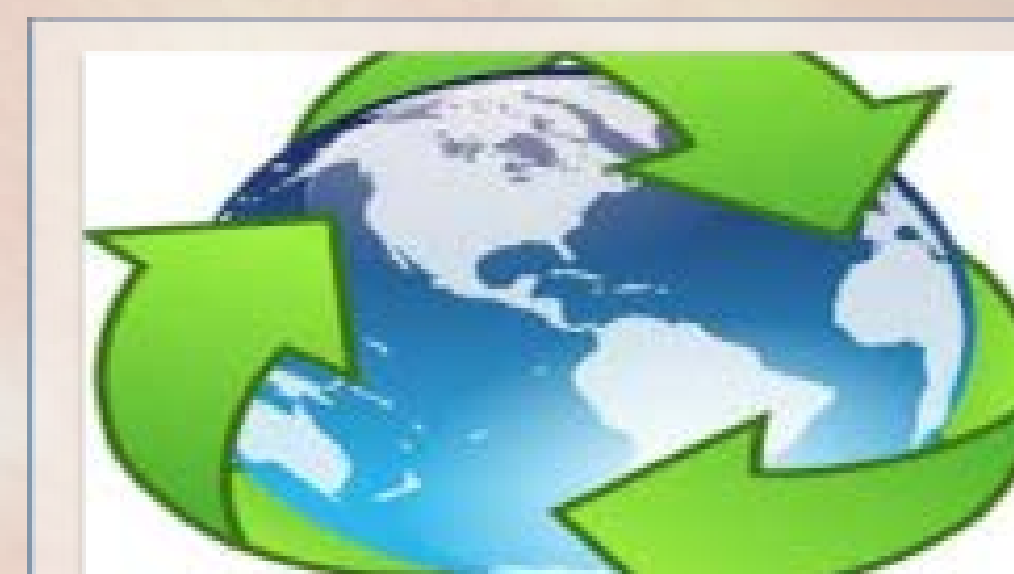
**Production of Biogas**

Biogas containment unit [Photograph]. (2009, August 8). Retrieved from <http://static.panoramio.com/photos/large/26923451.jpg>



**Production of Compost**

Compost in hand [Photograph]. (2003, July 4). Retrieved from <http://www.ways2gogreen.com/images/compost.jpg>



**Environmental Security**

Environmental security [Image]. (2010, August 3). Retrieved from <http://www.epa.gov/nrmr/std/images/a/LCA.gif>

## References

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