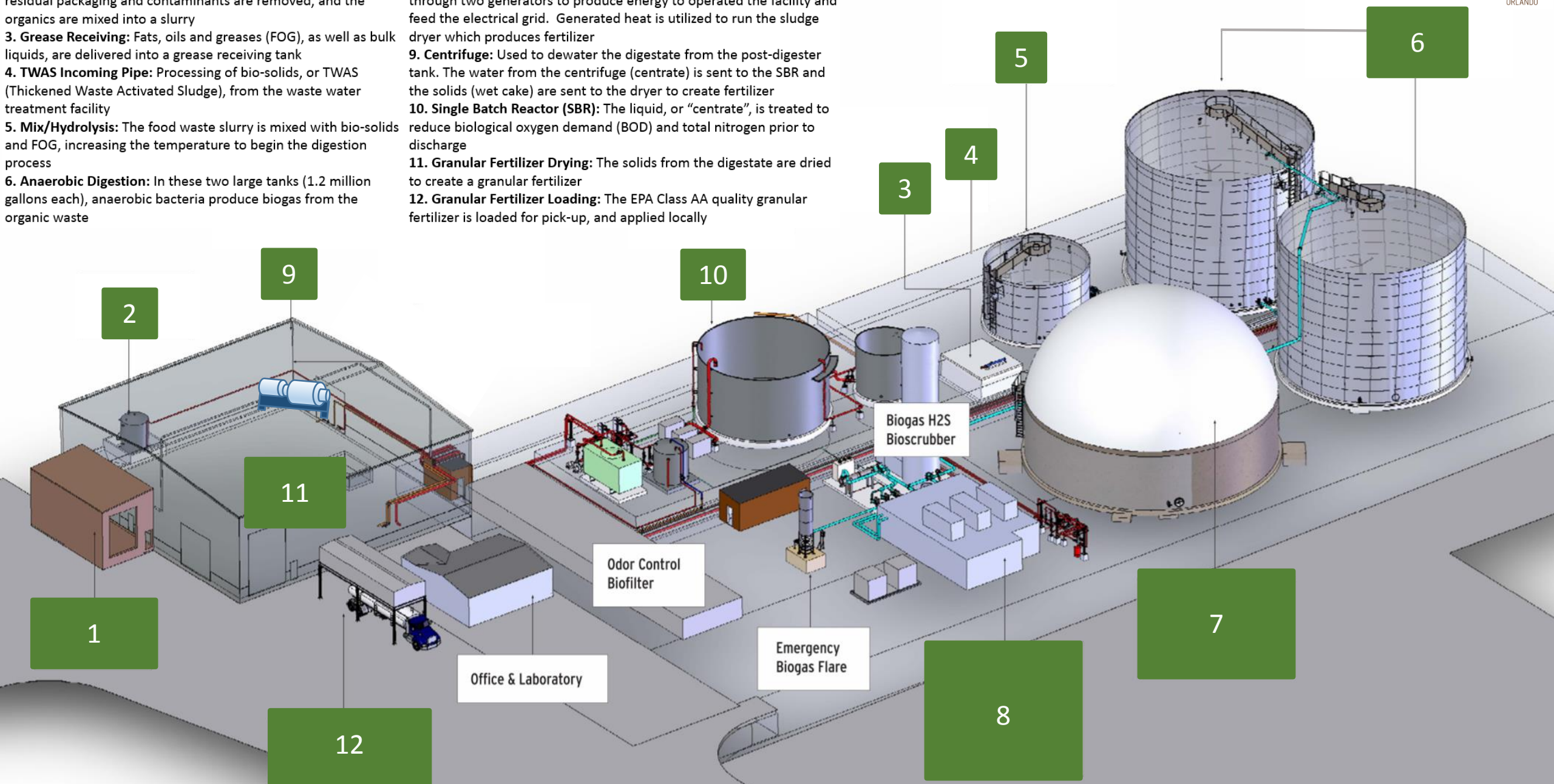
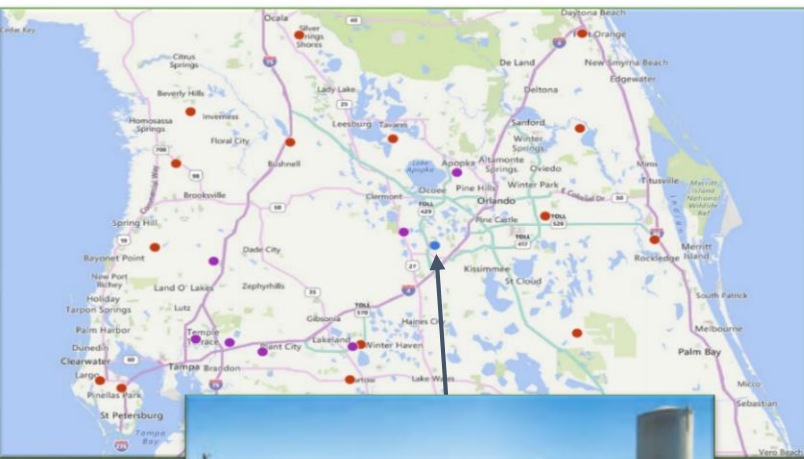


Process Flow

- 1. Food Waste Reception:** Food waste is tipped inside the reception pit
- 2. Pre-Processing:** In the enclosed pre-treatment building, residual packaging and contaminants are removed, and the organics are mixed into a slurry
- 3. Grease Receiving:** Fats, oils and greases (FOG), as well as bulk liquids, are delivered into a grease receiving tank
- 4. TWAS Incoming Pipe:** Processing of bio-solids, or TWAS (Thickened Waste Activated Sludge), from the waste water treatment facility
- 5. Mix/Hydrolysis:** The food waste slurry is mixed with bio-solids and FOG, increasing the temperature to begin the digestion process
- 6. Anaerobic Digestion:** In these two large tanks (1.2 million gallons each), anaerobic bacteria produce biogas from the organic waste

- 7. Post-Digester Tank:** The anaerobic digestion process is completed and a double-membrane gas holder stores the biogas
- 8. Combined Heat and Power:** Conditioned biogas is processed through two generators to produce energy to operate the facility and feed the electrical grid. Generated heat is utilized to run the sludge dryer which produces fertilizer
- 9. Centrifuge:** Used to dewater the digestate from the post-digester tank. The water from the centrifuge (centrate) is sent to the SBR and the solids (wet cake) are sent to the dryer to create fertilizer
- 10. Single Batch Reactor (SBR):** The liquid, or "centrate", is treated to reduce biological oxygen demand (BOD) and total nitrogen prior to discharge
- 11. Granular Fertilizer Drying:** The solids from the digestate are dried to create a granular fertilizer
- 12. Granular Fertilizer Loading:** The EPA Class AA quality granular fertilizer is loaded for pick-up, and applied locally





Harvest Power Orlando Organic Energy Unleashed – An Innovative Solution

Located within the Reedy Creek Industrial District, the facility is engineered to co-digest bio-solids with food wastes from local businesses. Specialized pre-processing equipment allows the facility to accept and process food waste with packaging. Clean energy is fed into the electrical grid and natural fertilizers are spread locally. Partners include tourist and resort locations as well as restaurants, grocery stores, hotels, sports arenas, golf courses and the agricultural community.

Our Mission

Using environmentally sustainable practices, we convert organics – those that have historically been landfilled or otherwise disposed of – into electrical energy and other beneficial products.

Organics Diversion & Waste Solutions

We partner with communities and the waste industry to solve problems and help achieve sustainability in waste utilization, clean energy innovation, and soil revitalization.



Harvest Power Orlando Features & Capabilities

Capacity: 130,000 tons/yr waste throughput

Energy Output: 3.2 MW

Produce Output: 5,000 metric tons/yr granular fertilizer

Technologies: Continuously Stirred Tank Reactor (CSTR) – low solids

Feedstock:

- pre-consumer food waste recycling
- source separated organic (SSO) food waste from industrial, commercial and institutional sources including local theme parks, hotels, restaurants, and food processing
- de-packaged food and juices (pallets, drums and totes)
- bulk liquids
- juice
- fats, oils, and greases (FOG)
- glycerin
- bio-solids/TWAS

