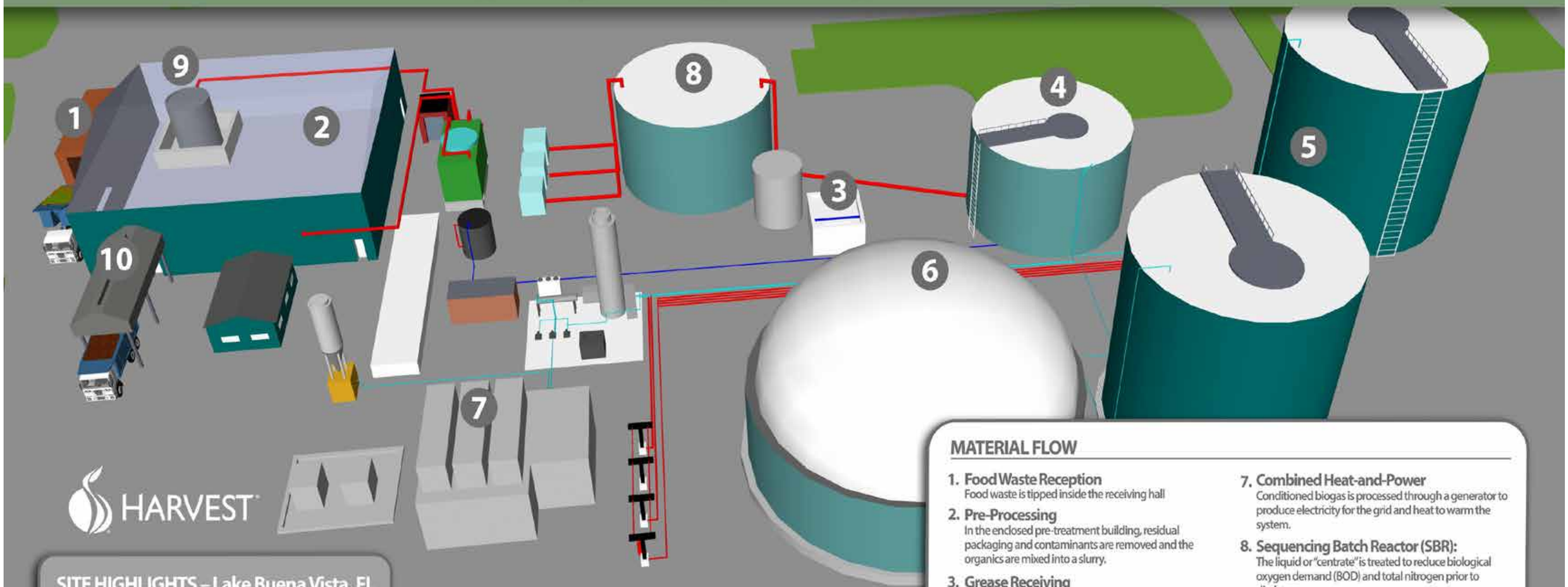
# Harvest's Energy Garden

## *Completing the Organic Loop in Central Florida*




### SITE HIGHLIGHTS – Lake Buena Vista, FL

- **Feedstock Flexibility:** The ability to accept many food wastes.
- **Advanced Odor Control:** Robust biofilters keep the story sweet.
- **Community Engagement:** Orlando or Landfill Campaign promoting Responsible Food Recovery

### MATERIAL FLOW

1. **Food Waste Reception**
   Food waste is tipped inside the receiving hall
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 grease (FOG) are delivered into a grease receiving container.
4. **Mix/Hydrolysis**
   The food waste slurry is mixed with biosolids and FOG, and brought up to a warm temperature to begin the digestion process.
5. **Anaerobic Digestion**
   In these two large tanks (1.2 million gallons each), anaerobic bacteria convert the organic waste into biogas.
6. **Post-Digester Tank**
   Residual liquids complete the anaerobic digestion process and a double-membrane stores the biogas.
7. **Combined Heat-and-Power**
   Conditioned biogas is processed through a generator to produce electricity for the grid and heat to warm the system.
8. **Sequencing Batch Reactor (SBR):**
   The liquid or "centrate" is treated to reduce biological oxygen demand (BOD) and total nitrogen prior to discharge.
9. **Struvite Reactor**
   Phosphorous is recovered from the liquid centrate to create a fertilizer pellet.
10. **Granular Fertilizer Loading**
    The solids from the digestate are dried to create a granular fertilizer that meets EPA Class AA or EQ quality, and applied onto fields.