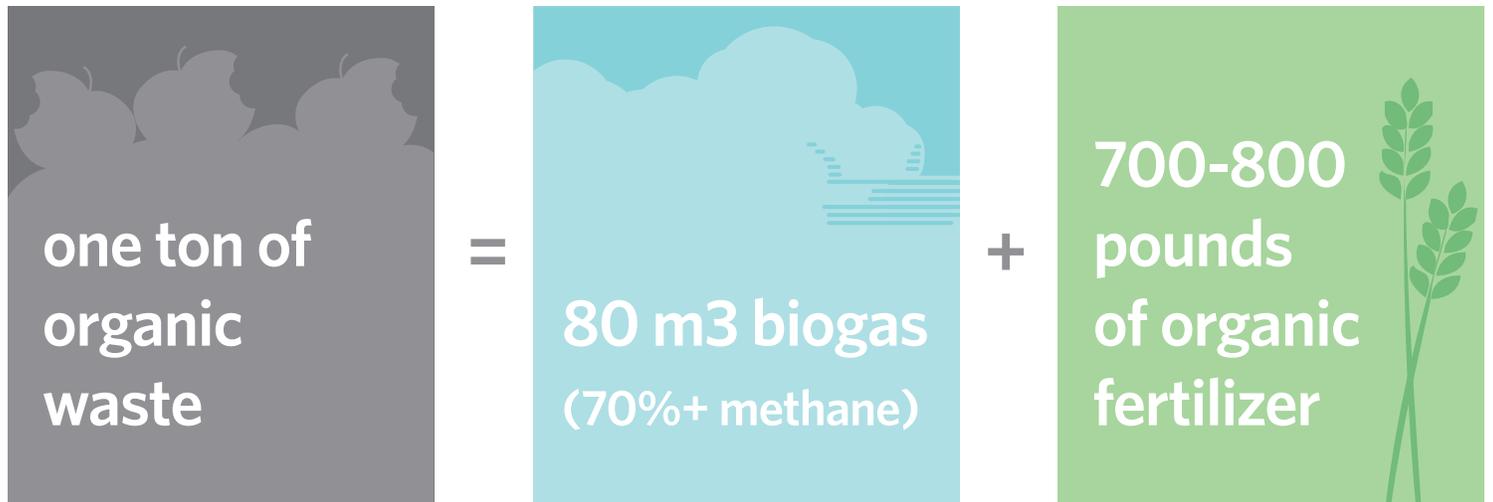




The Aikan™ System:

New  
Options  
From  
Old  
Landfills

# Transforming waste to resources with Aikan™



*Every landfill is packed with potential—potential energy, potential community benefit, and potential revenue. Adding an Aikan™ plant to an existing landfill unlocks that potential, turning waste into a valuable, community-friendly, beneficial resource.*

## THE SHORT STORY

- ◆ Proven, reliable, field tested (full-scale plants operating for years), easy-to-operate technology with performance guarantees based on specific local conditions
- ◆ Backed by a company with established expertise in waste management, renewable energy sources and soil/compost production issues.
- ◆ Significantly reduces amount of organic waste entering the landfill.
- ◆ Creates profitable outputs — nutrient-rich compost and high-quality biogas (methane).

## SURPRISING PLUSES

- ◆ Limited sorting of waste prior to processing.
- ◆ A wide range of organic waste from varied sources can be processed into biogas and/or compost, including:
  - Household trash
  - Food and grease trap waste from restaurants
  - Dewatered sludge from wastewater treatment plants
  - Agricultural and yard waste

- ◆ Handling more types of waste creates opportunities to bring new paying users to the landfill.
- ◆ “Batch production” approach treats different types of waste simultaneously and independently.
- ◆ Unlike incineration, produces no hazardous slag requiring special handling or disposal.
- ◆ Leachates and compost can be sold as nutrient-rich, solid fertilizer.
- ◆ Aikan™ plants integrate easily with existing biogas operations, and their size can be adapted continuously according to needs. New modules are added only when demand and capacity increase.

## THE ULTIMATE VALUE

- ◆ Accelerated natural process using standard technology = greater reliability, lower operating costs, 100% uptime.
- ◆ Reduced labor costs.
- ◆ New revenue streams through sales of byproducts.
- ◆ Extended landfill life.
- ◆ Improved community image as a cleaner, “greener” facility.
- ◆ Scalable technology — capacity built to match your needs.

## A New Perspective—Explore the Aikan™ System

**Reliable. Natural. Valuable.** That's the philosophy of the Aikan™ system and it will change how you think about the waste in your landfill. By taking a process that occurs in nature and accelerating it — using readily available technology — Aikan™ unlocks options you may never have considered before.

When you employ the Aikan™ system in your landfill, you'll see organic waste coming into your landfill in a whole new light. You'll see rich fertilizer waiting to be sold to farms, or used in public gardens, parks and athletic fields. You'll see a nearly limitless supply of energy-rich methane that can generate heat or power as part of the local electrical grid. You'll see years added to the lifetime capacity of your landfill.

The Aikan™ system gives you a proven method for transforming organic waste into valuable resources through wise use of readily available technology. The system has 100% uptime, low costs of operation and requires minimal training for staff.

It also solves some of your most difficult problems:

- ♦ **Yard waste disposal** - Chipped yard waste is an ideal component to include in the Aikan™ process because it keeps the other waste elements from compacting.
- ♦ **Leachate disposal** - All leachate can be processed into safe, clean, nutrient-rich solid fertilizer.
- ♦ **Water runoff** - During the Aikan™ process water evaporates, eliminating moisture from the final byproducts.
- ♦ **Loose waste and odor** - Because the Aikan™ modules are entirely enclosed, waste is confined and does not blow away. Keeping it enclosed, plus removing water and using special bio filters, means unpleasant odors are also reduced.

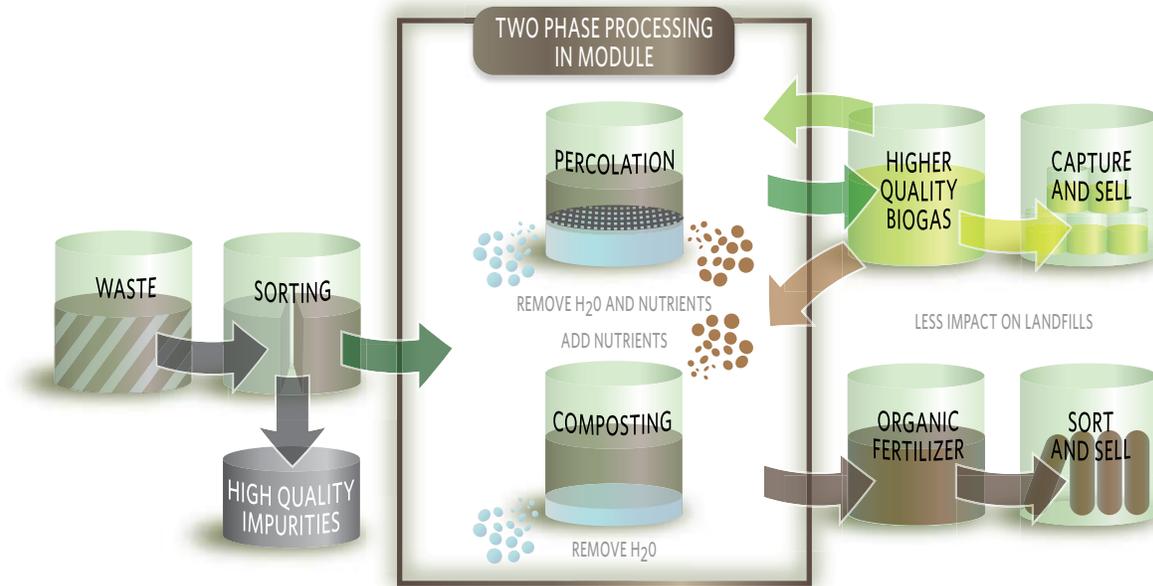


- ♦ **Emissions of greenhouse gasses** - Air pollution is minimized because the organic waste is treated separately in enclosed reception and processing modules. All methane produced is captured and stored. When it comes to carbon dioxide, the compost created by the system acts as an immediate "carbon sink" to absorb excess gas on site. There are long-term emissions reductions among other sources as well: the compost has high phosphorus content and can substitute for commercially mined phosphorus, reducing CO<sub>2</sub> emissions resulting from mining and transport.

If you process 25,000 tons of organic waste in a year in an Aikan™ facility you can generate enough electricity for 1,500 families and provide heat equivalent to burning 400,000 gallons of oil.

# THE AIKAN™ SYSTEM: SQUEEZING TREASURE FROM TRASH

Traditional methane capture in the U.S. lacks the flexibility and efficiency of the Aikan™ system. Now landfills can implement a simple, robust, low-cost system to generate and capture high-energy content. Key benefits include: (1) reduced contamination from better **sorting**; (2) greater ROI from **selling higher quality biogas and organic fertilizer**; (3) lower environmental risks and discharge due to **reduction of excess water**; and (4) extended life of landfills.



The Aikan™ system is built on your site using locally-sourced products and services. From steel and concrete, to construction labor, the entire structure is created with resources from nearby communities. That also makes future maintenance easier and more cost effective.

## PARTNER WITH A TRUSTED EXPERT

Solum Gruppen ([www.solum.com](http://www.solum.com) - creators of the Aikan™ system) has more than a quarter century of experience and is Denmark's largest supplier of growth media and turf care products.

The company's trailblazing approaches to waste processing, and its outstanding business operations, have been spotlighted. In 2009, Solum Gruppen was awarded the Danish Liberal Party Climate and Environment Award, which was presented by the Danish Prime Minister. The award was given for Solum Gruppen's ability to successfully combine environmentally friendly waste management with a smarter business model. The company also received the Gazelle Award from Borsen (Denmark's leading business newspaper) for outstanding business management and growth in 1999, 2000 2006 and 2007.

With financial strength of nearly \$4 million in venture capital funding for international expansion, Solum is bringing the Aikan™ system to North America after successfully operating in Denmark and Norway.

## START INNOVATING TODAY

Think differently about waste handling today. Think Aikan™:

- Low-cost processing
- Capture high-energy biogas
- Produce clean organic fertilizer
- State-of-the-art odor control
- New profit potential
- Low energy requirements, limited material handling, no moving parts
- Repeated, consistent, proven results with no operational downtime

Contact Aikan North America — [www.aikan.eu](http://www.aikan.eu) — (404) 835-9417 — [info@aikan.eu](mailto:info@aikan.eu). Unlock the potential.