What is Biogas?
the current and potential biogas market

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Overview

• How Biogas is Made (Feedstocks & how systems work)
• How Biogas is Used (including digestate)
• Biogas Market Today & its Potential
Food Scraps
Wastewater Solids
Organic material is delivered to the digester system. This may include animal manure, food scraps, agricultural residues, or wastewater solids. Digested material may be returned for livestock, agricultural and gardening uses.

Some biogas can be used to heat the digester.

Raw biogas is processed. Typically, water, carbon dioxide and other trace compounds are removed, depending on the end use, leaving mostly methane.

Processed biogas is distributed and used. The gas may be used to produce heat, electricity, vehicle fuel or injected into natural gas pipelines.

Digested material is processed and distributed. Solids and liquids from the digester may be used to produce marketable products, like fertilizer, compost, soil amendments or animal bedding.

Organic material is broken down in a digester. The digester uses a natural biological process under controlled conditions to break down organic material into products for beneficial use or disposal.

The USDA, the EPA and the American Biogas Council have collaborated on this illustration to explain the process of biogas production and use.
Digesters
Energy (gas)
Digestate (liquid + Solids)
Digestate Products
U.S. Biogas Market – Current and Potential

- 2,200+ Operational Biogas Systems
- 247 on Farm (dairy, swine only)
- 1,269 Water (860 using their biogas)
- 39 Food Scrap
- 652 at Landfills
- 8,241 on Farm (dairy, swine only)
- 3,888 Water (incl. 380 not using their biogas)
- 931 Food Scrap
- 13,500+ Potential New Biogas Systems
- 415 at Landfills

American Biogas Council