



The next generation of energy infrastructure



BIOENERGY DEVCO (BDC) stands at the forefront of introducing commercial-scale anaerobic digestion technology to the United States, offering a robust, economically viable, and sustainable alternative to landfills, land application and incineration. With the support of our European wholly owned subsidiary, BTS Biogas, we bring a wealth of knowledge amassed over 25 years in anaerobic digestion. BDC excels as a global leader, specializing in the finance, design, construction, engineering, and operation of anaerobic digestion facilities.

We have successfully constructed over 250 anaerobic digestion plants across four continents, manage 140 of these facilities, boast 29 international patents, and perform more than 170,000 microbial tests annually through our proprietary laboratory.

Award-Winning Leaders in Anaerobic Digestion





ironment



LEADERSHIP





NICK THOMAS CEO

"We are creating the next generation of energy infrastructure."

Rooted in generational engineering and a chemical engineer by training, Nick has over 25 years of transformative industry experience. Serving as Chairman and CEO of a prominent midstream services company, orchestrating an \$885 million sale to a major midstream company, adding to his impressive track record of over a billion dollars of value creation for stakeholders.

Known for his transparent and integrity-driven leadership, Thomas is a respected industry figure who is dedicated to achieving excellence in every endeavor. Nick's leadership ethos, grounded in transparency and integrity, firmly establishes him as a respected and influential figure in his industry.

BDC is deeply committed to environmental stewardship and advancing the circular economy. Our mission is to transform organic food waste into renewable energy and compost, empowering states, communities, and companies to fast-track their environmental objectives and decarbonization efforts. At BDC, sustainability is deeply embedded in our DNA, which reflects our commitment to transforming organic waste into beneficial resources for the planet.



Food waste sent to incinerators, landfills, or land applied is a **BY THE** significant contributor to climate change and has become a **NUMBERS** global and local climate emergency.

The U.S. discards roughly **100 million tons of food every year**, with **53% disposed through land application, landfills, and incineration**.

If food waste were a country, it would be the third largest GHG emitting country in the world



We are excited to be in the forefront of renewable energy as America takes the pledge to reduce **40% of our carbon emissions by 2030**.

Our Maryland commercial-scale AD facility generates 340,000 MMBtu of renewable energy and prevents the release of Carbon Dioxide (CO-eq) equivalent of:2





Anaerobic Digester

 » Organics are fermented in large cylindrical tanks
» Organics diversion from landfills, incinerators and land application
» Cost-effective and sustainable

ORGANIC WASTE

- » Source separated organics
- » Packaged food
- » Produce processing culls
- » Food processing residuals
- » Fats, oils, and greases

RENEWABLE ENERGY

- » Renewable electricity
- » Co-generation /combined heat & power
- » Renewable natural gas into pipeline
- » Compressed RNG for fleet vehicles
- » Green hydrogen

ORGANIC SOIL

- » Nutrient-rich amendment, similar to compost for agriculture and horticulture uses
- » Options to dewater, dried, palletized nutrient

ABOUT ANAEROBIC DIGESTION

Cleaner Air, Water & Soil

Anaerobic Digestion is a means to manage various organic waste streams from food manufacturers, the protein industry and farmers. It's an environmentally sound way to create renewable energy while reducing air, water and soil pollution in local communities. Anaerobic digestion:

» Reduces greenhouse gas
emissions by redirecting organic
waste from landfills and
incineration;

 » Produces clean energy to reduce our consumption of fossil fuels;
» Creates nutrient rich soil amendments that reduce the need for synthetic fertilizers
» Advances business and government net-zero and decarbonization goals, while creating green jobs.

SUSTAINABILITY REPORTS FOR YOUR ESG & DECARBONIZATION GOALS

Our sustainability reports detail the emissions avoidance associated with each organic waste (feedstock) source's contribution to the redirection of waste to our anaerobic digester. By supplying our customers with this mitigation information, they can then report on their decarbonization and ESG goals.

Avoided emissions are calculated using our in-house Life Cycle Assessment (LCA) methodology



» This LCA quantifies the entire spectrum of greenhouse gases (CO₂-eq) including avoided emissions for the whole life cycle of the project.

» We then isolate each feedstock provider's proportionate contribution to the project's emissions avoidance.

- » That contribution's metrics are then broken out in a tailored fashion to align with your sustainability reporting structure.
- » In many cases, there is also a negative impact to the local soil and watershed resulting from current waste-handling practices, such as land application.

» The rerouting of material to the digester produces a soil conditioner that promotes the overall soil health and minimizes runoff from land-applied raw material.

» The resulting positive effect on the overall health of the soil and watershed associated with this diversion can also be included in the sustainability report.

Obtaining Scope 3 Emissions with Anaerobic Digestion

Sustainability is becoming more and more crucial in today's world, and companies are recognizing the importance of reducing their greenhouse gas emissions. Scope emissions have become an essential component in measuring a company's carbon footprint Scope 3 emissions can be challenging to obtain because they are indirect and often occur outside of a company's control.

The first step in obtaining scope 3 emissions is to **identify the sources**. This can include suppliers, customers, transportation and storage providers.

Once the sources have been identified, it's essential to **collect data** on the emissions produced. This can be done by asking suppliers and transportation providers to report their emissions data, using industry benchmarks, or conducting surveys..

Once the data has been collected, the emissions can be calculated using a standardized methodology, such as the Greenhouse Gas Protocol.

After the emissions have been calculated, companies can implement strategies

to reduce their scope 3 emissions. This can include working with suppliers to reduce their emissions, optimizing transportation routes, and encouraging sustainable product use.

Recycled Waste

By using anaerobic digestion, organic waste can be redirected from landfills and incinerators, reducing the emissions associated with waste disposal Methane is a potent greenhouse gas that is produced when organic waste decomposes in landfills. By recycling this waste, companies can reduce their scope 3 emissions.

Generate Energy

Biogas produced from anaerobic digestion can be used to generate electricity, heat, or steam. By using biogas as a renewable energy source, companies can reduce their scope 2 emissions associated with purchased electricity directly from Bioenergy Devco.

Recycling

Companies can encourage sustainable practices by promoting the use of renewable energy sources, reducing waste, and promoting sustainable product use. By doing so, companies can reduce their scope 3 emissions associated with the supply chain and product use.



Healthy Soils

Digestate, a byproduct of anaerobic digestion, is increasingly recognized as a valuable soil amendment. During the anaerobic digestion process, organic matter, such as food waste, is broken down in the absence of oxygen, producing biogas and leaving behind a nutrient-rich residue known as digestate.

This substance is rich in essential nutrients like nitrogen, phosphorus, and potassium, making it an excellent alternative to synthetic fertilizers. Digestate also contains valuable micro-nutrients and organic matter that can improve soil structure, enhance water retention, and promote microbial activity, all contributing to healthier soil. The application of digestate to agricultural lands offers multiple benefits for soil health. By incorporating digestate into the soil, farmers can improve the soil's organic matter content, boosting its fertility and structure. This enhancement in soil structure improves aeration and water infiltration, reducing erosion and runoff and maintaining more nutrients within the soil profile for plant use.

Additionally, the microbial content of digestate can help suppress soil-borne diseases and promote a more balanced soil ecosystem. The use of digestate not only recycles waste but also helps in building sustainable agricultural practices, thereby supporting the overall health and resilience of the soil.





Certified Destruction and Recycling of Palletized Food Waste

Bioenergy Devco (BDC), is now receiving pallets of surplus, expired, recalled, or damaged food and beverage products in New Castle, Delaware for destruction and recycling. Food waste will be recycled at the Maryland Bioenergy Center, a state-of-the-art food waste anaerobic digester located at the Maryland Food Center in Jessup, Maryland. Recycling food waste at the Maryland Bioenergy Center reduces Scope 3 Emissions.

We offer:

- Quick, confidential, and easy recycling of palletized food products
- Certificate of Destruction documentation
- Competitive pricing
- Transportation options
- Fast response and acceptance

BENEFITS OF PARTNERING WITH US



Proximity to our digesters reduces transportation costs



Stabilize disposal costs with fees held constant through the lifetime of your contract



State-of-the-art depackaging equipment



Compliance with waste legislation



ESG reporting to help meet your sustainability goals



Meet consumer demand for sustainability



Lab testing, monitoring and nutrient management support from a dedicated microbiology lab



25 years experience with over 250 Anaerobic Digester installations around the globe

FACILITIES

Maryland Bioenergy Center

Jessup, Maryland

Maryland Bioenergy Center is Maryland's premier organics recycling facility.

Centrally located in the Maryland Food Center in Jessup the facility is less than 30 miles from all of Baltimore and Washington, DC. Within this facility, excess organics produced by the region's food manufacturers and retailers are transformed into renewable energy and fertile soil amendments.

This remarkable transformation both decarbonizes Maryland's waste and energy sectors, enabling our businesses and communities to prepare for a healthy and sustainable future.





FACILITY SPECIFICATION FEEDSTOCKS

130,000 tons/year of solid and liquid food residuals and packaged food waste

ENERGY PRODUCTION

340,000 mmBTU/year (RNG)

DIGESTATE PRODUCTION

16,575 tons/year for soil blending

Bioenergy Innovation Center

Seaford, Delaware

Under Construction: Compost Facility in Operation

The Bioenergy Innovation Center (BIC) is a state-of-the-art facility dedicated to minimizing environmental impact, helping to build healthy soils by enriching the land, creating new opportunities for farmers and consumers throughout the Delmarva peninsula.

The BIC is currently operating as a compost facility with sales of this organic product throughout the Delmarva. The addition of an anaerobic digestion system will enhance the facility's outputs to include RNG and digestate that can be used as a soil amendment.



USE OF BIOGAS Production of electricity and heat

USE OF DIGESTATE It re-enters the olive plant production cycle, helping to improve quality and quantity.



FEEDSTOCKS

Up to 210,000 tons/year of excess organics from the poultry industry such as DAF and litter

GAS PRODUCTION

410,000 MMBtus each year of renewable natural gas

Agroenergy Italy

Located in Andria, Italy, Agroenergy is one of the pioneering biogas plants in Europe, operating a 100% circular and closed-loop system. It is uniquely powered entirely by olive pomace—the organic material derived from milling olives—making it fully sustainable within the circular economy. This innovative approach ensures the plant's contribution to environmental sustainability by efficiently utilizing agricultural waste.





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