



Better food, Better planet.

NextGen Ag



BLACK & VEATCH



Black & Veatch is a leading global engineering, consulting and construction provider. We work closely with clients to deliver solutions, regardless of project size or location.

The future of food, beverage and agriculture has never been more exciting and promising.

Companies want to address the world's food-chain supply and climate change impact in a sustainable way, meeting today's needs and tomorrow's challenges of feeding a growing global populace.

Our NextGen Ag team at Black & Veatch is your ideal partner, given our expertise of bridging the gap between science, research and development, engineering and commercialization. We're pros in optimizing your existing facilities, designing and building new ones and collaborating with you to bring emerging, new-to-world food, beverage and agricultural innovations to market.

We'll handle the entire process — from start to finish, or simply wherever you are in your journey. From process and development to

engineering through the design and construction of a pilot project or commercial manufacturing operation, we're masters at doing it all on time and on budget. All the while freeing you to focus on what you know and do best.

Black & Veatch is a leading global engineering, consulting and construction provider. We work closely with clients to deliver solutions, regardless of project size or location. According to the Engineering News-Record in 2019, BV consistently ranks as a Top Design Firm nationally. The Black & Veatch NextGen Ag team has the talent, experience and global footprint necessary to deliver turn-key solutions to help your business innovate, expand and succeed.

Market Offerings

From alternative protein manufacturing to waste-to-value initiatives, Black & Veatch has the engineering and construction solutions to bring a wide variety of traditional and innovative production methods and products to market, at scale.



Alternative Proteins

Offerings based on plants, insects and even cellular will revolutionize global supply chains. We know how to embrace the various technologies and help you scale-up the new-to-market opportunities and help provide for the growing global population.



Sustainable Solutions

Whether you're in the process of benchmarking and establishing or ready to execute against defined corporate sustainability goals, we can help. We specialize in solutions for greenhouse gas emission reduction targets, water and wastewater management or energy/renewable energy integration and zero-waste and waste-to-value initiatives.



Food & Beverage

From the initial planning stages to process and packaging design, construction, automation and controls integration, and startup/CQV, we understand the unique challenges and pressures that both established and emerging food and beverage manufacturers face.



Controlled Environment

Vertical farming can optimize plant growth through various farming techniques that use less water than traditional cultivation practices. We partner with Ag Tech companies to start or scale their indoor farming solutions into large-scale commercial ventures.



Industrial Biotech

More companies than ever are leveraging biological based technologies to meet today's needs and tomorrow's challenges. From the food we eat, to the materials we wear, biotechnology continues to play a more critical role in each of our daily lives.



Aquaculture

As demand for seafood rises and sustainability concerns come into focus, our experience designing and building both small and large-scale water/wastewater infrastructure delivers value to recirculating aquaculture projects to efficiently raise fish in controlled environments.

Services Offered

Black & Veatch NextGen Ag is your trusted partner, from the initial planning stages through start-up and beyond. We have the flexibility to meet the needs of you and your investors through a range of service offerings. No matter where you are on your journey, we can help get you to where you want to be.

Project Financing

- Financial modeling and project development
- Independent engineering evaluations
- Turnkey asset development

Planning

- Project definition and master planning
- Feasibility studies
- Site selection & condition assessment

Sustainability Solutions

- Sustainability assessments including energy & water audits
- Renewable energy and organics management (incl. aerobic and anaerobic digestion)
- Leadership in Energy and Environmental Design (LEED) certification

Design and Engineering

- Complete facility design and engineering
- First of Kind Product (FOAK) Scale-up & innovative technology implementation
- Project, program, and risk management

Process Design

- Process design and engineering with emphasis on hygienic/sanitary design
- Pilot plant scale-up
- Fermentation/bioprocess scale-up

We offer expertise in engineering, procurement, and construction (EPC), with flexible capabilities to tailor our solutions to meet our client's needs.

Packaging Systems

- Material handling systems
- Integrated packaging systems
- Primary and secondary packaging

Controls and Automation

- Automation Systems Programming and Integration (PLC and HMI/SCADA Systems)
- Data Collection & Downtime/OEE Analysis; Enterprise Systems Integration (MES/ERP)
- Network design, security, and remote access

Construction

- Equipment and sub-contractor procurement
- Construction and safety management
- Project controls

Startup and Commissioning

- Vertical startup
- Commissioning, Qualification, and Verification (CQV)
- Operator and maintenance training

NextGenAg

For more information contact us at bv.com/nextgenag.