

Largest Renewable Natural Gas Project of Its Kind Implements Manure-to-Energy Technology Across Northern Missouri, Celebrates Construction Completion Ahead of Joint Venture's 10-Year Anniversary

Smithfield Foods and RAE mark ten years of partnership, complete installation of renewable natural gas (RNG) technology on nearly all Smithfield company-owned farms in the state

SMITHFIELD, Va., Aug. 11, 2021 /PRNewswire/ -- Monarch Bioenergy, a joint venture between [Smithfield Foods, Inc.](#) and [Roeslein Alternative Energy](#) (RAE), has finished installing manure-to-energy technology on nearly all of Smithfield's Northern Missouri hog finishing farms.

The new technology captures methane emissions and converts them into carbon-negative renewable natural gas (RNG) to power homes, vehicles and businesses.

"We are delighted to reach this exciting milestone, which is a significant step toward fulfilling [our commitment](#) to implement this transformative, cutting-edge technology on the vast majority of our finishing farms in multiple states," said Kraig Westerbeek, vice president of Smithfield Renewables for Smithfield Foods. "Our Monarch Bioenergy manure-to-energy projects are making a significant environmental impact and remove 25 times more emissions from the atmosphere than are emitted during the clean energy's end use. Because of this, they are key projects in our Smithfield Renewables portfolio of innovative renewable energy and carbon reduction efforts across our operations."

Construction of the approximately \$150 million project officially began in 2014, three years after RAE and Smithfield first had the idea to embark on the joint venture. The proprietary processes that emerged from the project create carbon-negative RNG at a rate of approximately 800,000 dekatherms annually.

In addition to generating renewable energy, the partnership has planted hundreds of acres of prairie grass, providing ecological services and wildlife habitat for monarch butterflies across the state. The companies are also exploring harvesting prairie plants to create biomass for RNG production.

"With perseverance and dedication to our vision we navigated the pathways for swine manure with the California Air Resources Board (CARB) and the EPA to receive the lowest CI (carbon intensity) scores in the swine industry," said RAE Chairman and CEO Rudi Roeslein. "We are leading the way to improve the industry's environmental footprint and diversify its income stream. This is a blueprint on how to turn challenges into opportunities."

Collectively and independently, the companies have embarked on additional manure-to-energy projects across the country in Arizona, California, Colorado, Iowa, North Carolina, Texas, Utah and Virginia. To learn more about the process of converting manure into clean energy [visit this link](#).

The Monarch Bioenergy joint venture supports the companies' respective sustainability goals, including RAE's goal to restore 30 million acres of land to native prairie plants strategically located around waterways, streams, rivers and highly erodible lands and Smithfield's industry-leading goals to become carbon negative in U.S. company-owned operations and reduce GHG emissions 30 percent across its entire U.S. value chain by 2030.

More information on RAE's sustainability commitments is available [here](#) and information on Smithfield's signature Smithfield Renewables program [here](#).

About Smithfield Foods, Inc.

Headquartered in Smithfield, Va. since 1936, Smithfield Foods, Inc. is an American food company with

agricultural roots and a global reach. Our 63,000 team members are dedicated to producing "Good food. Responsibly.®" and have made us one of the world's leading vertically integrated protein companies. We have pioneered sustainability standards for more than two decades, including our industry-leading commitments to become carbon negative in U.S. company-owned operations and reduce GHG emissions 30 percent across our entire U.S. value chain by 2030. We believe in the power of protein to end food insecurity and have donated hundreds of millions of food servings to our communities. Smithfield boasts a portfolio of high-quality iconic brands, such as Smithfield®, Eckrich® and Nathan's Famous®, among many others. For more information, visit www.smithfieldfoods.com, and connect with us on [Facebook](#), [Twitter](#), [LinkedIn](#) and [Instagram](#).

About Roeslein Alternative Energy, LLC

Roeslein Alternative Energy (RAE) is the owner, operator and developer of renewable energy production facilities that convert agricultural and industrial wastes, along with renewable biomass feedstocks to renewable natural gas and sustainable co-products. RAE engages in these business operations with a focus on incorporating native prairie restoration. RAE is a limited liability company with its principal offices located in St. Louis, Missouri. RAE was launched in 2012 by Rudi Roeslein, co-founder and CEO of St. Louis-based Roeslein and Associates, Inc. (a global leader in engineering, modular fabrication, and construction of industrial plant facilities).

SOURCE Smithfield Foods, Inc.

For further information: Brandon Butler, Roeslein Alternative Energy, 660-281-9804, bbutler@roesleinae.com;
Lisa Martin, Smithfield Foods, 757-365-1980, lvmartin@smithfield.com

<https://Investors.smithfieldfoods.com/2021-08-11-Largest-Renewable-Natural-Gas-Project-of-Its-Kind-Implements-Manure-to-Energy-Technology-Across-Northern-Missouri,-Celebrates-Construction-Completion-Ahead-of-Joint-Ventures-10-Year-Anniversary>