



Horizon II is an innovative partnership united in advancing a new climate-smart system for US agriculture. The system will reduce greenhouse gas (GHG) emissions and improve carbon sequestration for corn, soybean, pork, and beef commodities, while creating transformational opportunities for small and historically underserved producers. The project will verify on a large scale that prairie grasses and cover crops are economically viable, low-CO2e commodities that provide a stable income stream to farmers. It will also expand the existing supply chains to produce renewable natural gas (RNG), biofertilizer, and carbon credits through the smarter utilization and connection of resources. The proposed climate-smart system will add further value in terms of soil health, clean water, flood control, and habitat for native wildlife. The Horizon II system will leverage \$700 million in capital spent on Horizon I projects to produce over 5 million Dth RNG in the next 5 years, and also use the existing natural gas transmission and distribution system. The new climate-smart system provides a transitional source of renewable energy that is distributive, reliable, and supplements, rather than competing with, food systems. Providing energy independence and security for the US and allies is vital in these times of uncertain supply from unreliable and sometimes even hostile countries.

Horizon II is a partnership led by Roeslein Alternative Energy to develop a new climate-smart agriculture value chain.

Partner organizations: Conservation Districts of Iowa, Iowa Agriculture Water Alliance, Iowa Soybean Association, Iowa State University, Missouri Prairie Foundation, Sievers Family Farms, Soil and Water Outcomes Fund, Smithfield Foods, The Nature Conservancy, University of Missouri, Verdesian, and Veterans in Agriculture.

"Since founding RAE, our overarching goal has been to provide farmers an alternative way to use land, especially highly erodible acres, in ways that will benefit the environment, wildlife, and their own livelihood. The USDA Grant funding will propel Horizon II forward more rapidly than otherwise would have been possible. We will show how farmers and landowners can do well for themselves while also providing ecological services and wildlife benefits."

-Rudi Roeslein, Founder and CEO, Roeslein Alternative Energy





A pilot will be developed, deployed, and verified in lowa and Missouri, where much of the nation's corn, soybeans, and pork are produced. Horizon II seeks to incentivize improved management of nitrogen fertilizer and other inputs on agriculture land, which is critical to the success of climate-smart practices.

Farmers, livestock producers, and landowners will be compensated for GHG reductions and carbon sequestration in the soil through an outcomes-based carbon credit program.

Cover cropping and grassland restoration will be further incentivized through a novel, market-based program that supports renewable natural gas (RNG) production through the anaerobic digestion of herbaceous biomass combined with manure. This renewable energy can be fed into the national grid and become part of the sustainable new value chain.

Program partners will collaborate with farmers, livestock producers, landowners, and other stakeholders, including early adopters of practices and historically undeserved producers, to ensure equitable access to the opportunities offered by the low-carbon agriculture of the future.

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H2 Climate-Smart Commodities Grant Program Roeslein Alternative Energy 9200 Watson Road, St. Louis, MO 63126 www.roesleinalternativeenergy.com "We are thrilled to partner on this transformational project that will drive adoption of prairie strips and cover crops; create clean, renewable natural gas; improve water quality, address climate change and improve America's energy independence,"

-Sean McMahon, Executive Director of the Iowa Agriculture Water Alliance.



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