Harnessing Bioenergy to Power a Sustainable Future in Blue Springs, Nebraska

Blue Springs Bioenergy

- Blue Springs is a small, predominantly agricultural community in Gage County, Nebraska, with a population of around 1,200 residents. The town has historically relied on fossil fuels to meet its energy needs, but now faces significant challenges.
- Limited access to reliable and affordable energy leads to high costs that undermine local businesses and burden household budgets, especially for vulnerable populations. Secondly, the aging energy infrastructure is prone to outages, disrupting operations and resilience. Lastly, the heavy reliance on carbon-intensive sources contributes to environmental impacts, constraining sustainable development and affecting community health.
- These challenges disproportionately impact lower-income residents and small businesses, exacerbating inequities. The bioenergy project aims to leverage the region's abundant biomass resources to develop a sustainable, locally-sourced energy supply that reduces reliance on fossil fuels, creates new economic opportunities, and promotes a healthier, more equitable future for Blue Springs.
- · Goals:
 - Achieve a biogas production capacity equivalent to 100 GWh by 2025
 - Increase the share of biogas in the regional/national energy mix
 - Promote economic growth and employment opportunities in the bioenergy sector
- Partners: Hoover Solutions, Santee Sioux Nation, Southeast Community College, Southeast Nebraska Economic Development District (SNEDD), Blue Springs Area Chamber of Commerce

Strengths

Strong team with diverse expertise in clean energy, industrial operations, economic development, tribal engagement, project management, and workforce development

 Established relationships and credible connections with the local community, including key stakeholders like the Santee Sioux Tribe, economic development organizations, and educational institutions

Operate profitable, large-scale biorefineries that extract bioenergy and plant nutrition from organic waste and residual products, contributing to a fossilfree society

Achieve a biogas production capacity equivalent to 600 GWh by 2024 and expand to 3 TWh by 2030 through strategic investments

Aspirations

 Leverage the region's abundant biomass resources to develop a sustainable, locally-sourced energy supply that reduces reliance on fossil fuels
Create new economic opportunities and jobs in the growing bioenergy industry, particularly for disadvantaged populations

Opportunities

Establish a reliable, affordable, and sustainable energy supply that reduces the community's dependence on costly and polluting fossil fuels Generate new jobs and economic opportunities in the bioenergy sector particularly for disadvantaged populations supporting balanced and just economic developmen

Results



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