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Community BioRefineries,

Roots and Wings: How Community BioRefineries Can Rebuild America's Forgotten Towns

"The greatest gifts you can give your children are the roots of responsibility and the wings of independence." ~ Denis Waitley

Introduction: A Manufacturing Renaissance in America

America stands on the brink of a manufacturing renaissance. After decades of watching factories close and jobs migrate overseas, the nation is rekindling its commitment to "American Made." This revival isn't merely an economic necessity; it is a cultural reawakening—a chance to restore pride in craftsmanship, create opportunities for millions of workers, and rebuild communities that have been left behind in the globalized economy.

In 2025, the United States is putting forth policies aimed at reshoring manufacturing jobs and investing in industries that align with the country's abundant resources and innovative spirit.

These efforts include:

- **National Investment in Domestic Manufacturing:** Federal programs and tax incentives designed to encourage companies to produce goods on American soil;
- **Localized Production Models:** A focus on regional manufacturing solutions that utilize local resources, reduce reliance on imports, and build resilient supply chains;
- **Job Creation Through Innovation:** Emphasizing sectors like bio-manufacturing, advanced materials, and renewable energy products to create the jobs of the future.

This shift isn't just about creating jobs; it's about reestablishing economic independence. A robust manufacturing economy ensures that America doesn't rely on foreign supply chains for critical goods and materials. It also allows communities across the country to flourish by connecting local talent, resources, and markets.

At the heart of this movement is the **Community BioRefinery (CBR)**—a model of localized manufacturing that bridges agriculture and industry. By transforming feedstocks, from root to flower, into valuable products like biofuels, bioplastics, and protein isolates, CBRs provide a blueprint for revitalizing America's small towns. These refineries represent not only a return to manufacturing but also a new era of opportunity, ingenuity, and prosperity. *And, by the way, brings along over 1000 direct and indirect jobs with it...*

Millfield's Quiet Decline

The train rattled through Millfield, Iowa, for the last time on a damp April morning in 2005. No one came to wave it goodbye. The factory had closed three months earlier, and with it went the rhythm that had kept the town alive. The whistle no longer called workers to the plant before dawn or lulled them home at dusk. Instead, silence spread over the town like a slow fog. The diner shut its doors when the lunch crowd dried up. The hardware store, which had stood for three generations, couldn't make its books balance without contractors buying tools. The youth left first, taking their

dreams to Chicago or Des Moines or Kansas City. Their parents followed a few years later, or stayed, waiting for something new to grow. But nothing did.

Millfield's story, like so many others, slipped into the cracks of American history—forgotten towns swallowed by the consequences of globalization. Once a thriving community anchored by the manufacturing economy, it was hollowed out when corporations sought cheaper labor overseas. As factories closed, small businesses struggled, schools lost funding, and hope quietly drained from the town.

But in 2025, there's a new hum on the horizon, a chance for towns like Millfield to dream again. It starts not with the clatter of steel or the roar of smokestacks, but with something as humble as a cornfield, or even a soy bean field. The future is rising from the roots of American farmland, and its name is the **Community BioRefinery (CBR)**.

CBRs are not just factories—they are lifelines, offering work to restless hands and a way for young people to plant their futures firmly in the soil of their hometowns. This essay weaves the story of how these new hubs of industry are reawakening communities, training youth, and giving families the tools to thrive once more.

The Train Comes Back: How CBRs Bring Opportunity

Imagine Millfield again, but this time, the year is 2025. The morning air is alive with movement. Trucks line the main road, loaded with corn husks, industrial hemp, and agricultural feedstocks—from root to flower—that a decade ago, would have been left in the fields. Young men and women climb out of pickup trucks and head toward the new factory just beyond the grain silos—the **Community BioRefinery**. Its smokeless stacks and modular buildings gleam in the sunlight, a stark contrast to the decaying ruins of the old plant.

Inside, workers are busy transforming the whole feedstock—from root to flower—into next-generation biofuels, bioplastics, and protein isolates with 90% purity—a key ingredient for plant-based foods, and much more. Unlike the assembly lines of the past, this work is purposeful and connected. Workers take pride in knowing their hands are creating something tangible, something useful.

CBRs are small factories, yes, but they're also places of innovation and learning. That's where the transformation begins.

Teaching Roots: Training Young Minds

Sarah Hendricks never thought her youngest boy, Luke, would stay in Millfield. He was always the restless type, with calloused hands from working summers on the farm but a mind that hungered for more. After high school, he was set on leaving, like his older brother, for a job in the city. "No future here," he said as he tossed his baseball glove into the moving box. But something happened before Luke could pack his truck and go.

The community college in the next county over announced a partnership with the new bio-refinery. They were offering a one-year certificate in bio-processing—**free tuition for local kids**. Luke's curiosity got the better of him. By the end of the year, he was wearing steel-toed boots and carrying a clipboard, checking the machines that processed soybean husks into adhesives.

The plant manager, a woman named Janine who'd once worked at a similar facility in Ohio, liked to call Luke her apprentice. "You see this, kid?" she'd say, pointing to a screen full of chemical readouts. "This is precision work. You're not just turning wrenches; you're making things the world needs." Luke stayed, not just for the paycheck, but because for the first time in his life, his work felt important.

CBRs don't just offer jobs; they create **career paths**. Through partnerships with local community colleges, they train young workers for roles in plant operations, logistics, and equipment maintenance. For every youth like Luke who stays, the community grows a little stronger.

Wings of Independence: A Family Transformed

Luke's decision to stay in Millfield didn't just change his life—it rippled outward. When he bought a small home on Third Street, the local bank had its first new mortgage in two years. When he married Clara, a nurse at the town's health clinic, the school board approved its first funding increase in a decade, expecting future enrollment to rise. And when their first

child was born, Millfield's hardware store—saved from closure by the increased business brought by the refinery—gifted the couple a hand-carved crib.

This is the magic of stability: when one family puts down roots, others find reasons to stay. **CBRs don't just create jobs; they create and enhance communities** that young families can call home. With steady wages, health insurance, and training opportunities, the plant workers of Millfield no longer need to dream of leaving. They can dream of staying.

From Root to Flower: The Practical Genius of CBRs

There's a poetry in how a CBR works. The entire feedstock—the corn, soy, industrial hemp, and agricultural residues, from root to flower—is transformed into products the world depends on. Farmers, who for years struggled to make ends meet, now have new markets for their entire crop.

Inside the plant, workers like Luke oversee the alchemy. Machines convert agricultural feedstocks into:

- **Plant Protein Isolates** for plant-based foods.
- **Bio-Based Butanol** for industrial applications.
- **Bioplastics** for packaging and consumer goods.
- **Nutraceuticals and Cosmeceuticals** for health and beauty products; **Fish feed for aquaculture**, and much more.

Every shipment leaving the refinery carries not just products but the pride of a community reborn.

Conclusion: Rewriting Millfield's Story

If you visit Millfield today, you'll hear the hum of trucks and the clatter of machinery, but you'll also hear the sounds of life—a baseball game in the park, laughter spilling out of the diner, and the cheers of students graduating from the community college. The refinery isn't just a factory; it's a second chance for a town that had nearly faded away.

CBRs represent a new chapter for America's forgotten towns. They bring more than jobs—they bring **purpose**. They train the next generation, stabilize families, and give communities like Millfield the chance to thrive again.

Denis Waitley's words ring true: the greatest gifts we can give our children are the roots of responsibility and the wings of independence. And in Millfield, those gifts are now made of corn husks, hard work, and hope.

AUTHOR'S NOTE: Millfield and Luke and his family are fictitious*; however, they represent the reality experienced by many thousands of families and small farming communities throughout the country. This reality is the driving reason for the development of a key founding principle and development of the business model of Community BioRefineries. CBR is focused on the revitalization of the Ag community as well as participating in the resurgence of manufacturing in America.

* The actual town depicted is near to where our CEO grew up in Iowa and saw first hand what was happening.

SEE: www.communitybiorefineries.com