

The Decentralization of Fuel Production

by Marc Goyette

The 70's and 80's were a very exciting time for people in the computer industry. New technologies were allowing small startups like Apple, Microsoft, Lotus, and others to capitalize on the ability of small devices to decentralize the delivery of computing power. That same thing is happening in the energy industry today. Biofuel technology is allowing small producers to deliver a high grade product that is superior to petrodiesel. That will revolutionize the way fuel is created and delivered to users.

Like the PC revolution, the early steps were awkward and uncoordinated. However we are moving into the early stages of reliable commercialization of biofuel technology. The things you need to create a successful biofuel business are:

- A reliable supply of animal or vegetable material. Organic material that is unacceptable for consumption (i.e. vegetable or animal byproducts) is ideal. Use of this material does not impact the price of food products, but does provide a more complete use of the entire value potentially available from organic materials.
- High quality production equipment that can reliably deliver almost a million annual gallons of biofuel product from an average sized meat or poultry processing operation.
- An on-site location located on less than one acre of land which can be processing organic materials within minutes of their availability.
- A 7x24 Network Operations Center than can monitor and manage all equipment remotely to assure optimal plant efficiency.

The availability of all four elements to solve this problem is a recent achievement. Oil has a very long life and can cost billions of dollars to build refinery capability, so it results in a centralized industry with a few powerful producers controlling the world supply. Biofuel raw materials have a very short life and, like a PC, can be handled with less expensive equipment. Therefore this industry is one that can be owned and operated by those who own the raw organic materials, and possess the technology and methodology to efficiently produce a high quality finished fuel.

Once computer processing could be accomplished on a small, inexpensive device, we captured the potential of colocating computer users and the power of computing on the same desktop. Many people credit the enormous productivity gains of the 80's and 90's to the PC Revolution.

The emergence of fuel refineries scaled for a single enterprise could have similar benefits. It takes low value animal and vegetable byproducts and turns them into fuel, which can be used by the local community. Decentralized energy production capabilities like biodiesel, wind, solar, and geothermal will move us towards local, regional and national energy independence.

The result is that the best practice leaders in the meat and poultry processing industries are recognizing this opportunity to add a very high value operation to supplement the income they are already receiving from their core operations. The substitution of organic byproducts as the source of new supplies for fuel will revolutionize the meat and poultry industries. It's a product line extension that can double the profits of meat or poultry processing. And it can do this while reducing our economic dependency on OPEC, providing a cleaner burning and water soluble fuel, and unlocking an enormous potential source of fuel for our future generations.

The decentralization of fuel production could have an impact as great or greater than the impact of the PC on our economy. We live in a very exciting time.

Author: Marc Goyette is the CEO of R3 Biofuels which is a Renton, Washington-based company that creates joint ventures to unlock the economic and environmental value of meat and poultry processing byproducts.