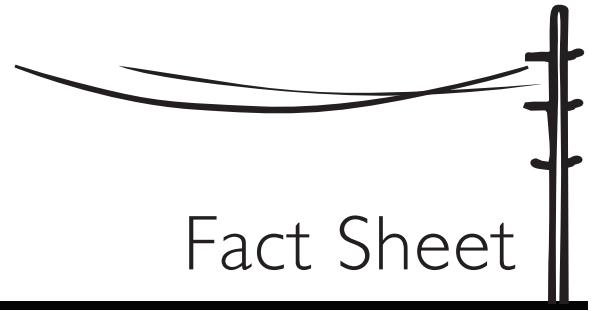




# WOOD<sup>to</sup> ENERGY



## Fact Sheet

### Financing Woody Biomass Facilities

*Bruce Crain & Alan W. Hodges*

Most people—including biomass energy advocates—know that federal, state, private, and foundation dollars are essential elements in the research and technology transfer stage for new product development. However, few are aware of the financing options that exist for the all-important next stage of product development—commercialization. Commercialization of any new energy source using new technology is considered new product development until a commercial-sized energy facility is successfully operated for an extended period of time on a consistent basis. For some communities and industries considering wood-to-energy facilities, it may be possible to tap financial resources that are typically reserved for the commercialization of new technology.

The financial services sector, be it a Wall Street venture capital group or a “Main Street” bank, possesses an institutional fear of anything new and unproven. And for biomass energy companies in particular, raising equity is difficult because many woody biomass-related projects and entrepreneurs are rural-based businesses that have yet to demonstrate the viability of the technology and the ability to penetrate the marketplace. They may also lack the proven managerial and marketing expertise needed in order to be successful. For some venture capitalists located almost exclusively in the nation’s cities, a rural start-up business commercializing an agricultural-based product is as foreign as the dark side of the moon. Others, however, may be looking for those unusual and risky but potentially highly rewarding opportunities that lie outside the mainstream.

Despite these challenges, various sources of funding are available if entrepreneurs and companies know where to look. These sources not only provide funding but alleviate the worries and trepidation on the part of the borrowing and lending communities.

In addition to owner equity, which is, of course, essential, a project may obtain grants, tax credits, state and local incentives, bonds, appropriated dollars, loans, guarantee loans, and other financial resources to make the project

commercially viable. Therefore when beginning a project, planners should seek out experts who can identify funding, open doors, find private and public lending resources, and arrange for these multiple funding sources. Doing so can greatly reduce the time and expense incurred during the commercialization phase and can also reduce the amount of private capital needed for a successful venture.

Start-up ventures are the most difficult to finance and may require the most steps and financial resources. One of the best sources of funds especially for start-ups can come from the very group with the most to gain from commercialization—the growers or producers who supply the biomass feedstock. By contributing cash or even a supply of raw materials, forest landowners can receive equity and a return on their investment if the company’s commercialization efforts are successful. Also, in some cases, the raw material can be counted as an asset that can be used to attract debt financing.

Federal, state, and local government assistance may be available in certain cases. This assistance can come in the form of direct appropriations, tax abatements, tax increment financing for infrastructure financing, and even grants for job training and other assistance. Also, federal tax credits may be available, which can be used by the investors or, in some cases, sold and converted to cash and used to attract debt financing. All of these sources can be difficult to obtain without the assistance of someone familiar with the appropriate public entities, funding sources, and governmental officials.

Other sources available to those new ventures fortunate enough to find them are known as “angels.” Angels are investors who are bullish enough on the new venture to provide the early stage investment necessary to get it off the ground. Angel investors are usually more patient investors than venture capital firms and may not require the substantial return on investment normally sought by venture capital firms, or they may accept delayed repayment.

Companies already in business manufacturing and selling value-added products have some attractive sources of financing unavailable to start-up companies, because lenders prefer companies with a track record. Even more attractive terms and rates may be available under certain circumstances. Existing companies can form special subsidiaries or nonprofit entities for the purpose of developing new sources of energy.

The following sections describe some of the many resources available and the governmental sources that provide them. Note: specific terms and dollar amounts will change with time. It is always advisable to research specific, up-to-date information when planning project financing.

## U.S. Department of Agriculture

### **Business & Industry (B&I) Guarantee Loan Program.**

The B&I Guarantee Loan Program provides up to a 90 percent loan guarantee to banks for businesses located in areas with 50,000 in population or less. The primary objective of the program is creation or preservation of jobs in rural areas. Loan proceeds may be used for working capital (seven-year amortization), machinery and equipment (fifteen-year amortization), buildings and real estate (up to thirty-year amortization), and certain types of debt refinancing. The maximum loan amount is \$40 million, and loans can include a fixed interest rate. Personal guarantees are required along with a minimum of 25 percent tangible equity for companies that produce energy from renewable sources. Obtaining the guarantee is a complicated process but is well worth it. It is especially helpful in small communities with small lenders that have limited lending capacity. A 70 to 90 percent loan guarantee can permit these small banks to make loans that otherwise would be considered too risky or do not meet established lending guidelines.

**Rural Utilities Service (RUS).** Approximately \$200 million in direct loans is available through USDA's Rural Utility Service for electricity produced from biomass energy that is generated for sale to rural utilities and power companies with a significant "rural customer load." Loan interest rates are tied to municipal bond rates and the rate is a fixed rate that is amortized for 25 years. This loan requires cooperative arrangement with local rural electric cooperatives or other power companies with a significant rural customer load. The technology must be "proven" and "renewable," however, the equity requirement for the borrower is flexible.

**Renewable Energy Grant and Loan Program.** The USDA Rural Business Service offers entrepreneurs a grant and guarantee loan program. Commercial entities and agricultural and forestry producers are eligible. This program has \$11.4 million available for grants and \$176 million in guarantee loan authority available for projects that produce energy from renewable sources. Grants can cover 25 percent of eligible project costs and guarantee loans can be for up to 50 percent of project costs. Loan terms are similar to B&I loan terms and conditions. Companies must demonstrate financial need in order to qualify.

### **Value-Added Agricultural Product Market Development Grants.**

The Rural Business-Cooperative Service now offers grants to help independent producers, such as forest owners, enter into value-added activities. The primary objective of this grant program is to help eligible applicants develop business plans and strategies for viable marketing opportunities. Grants of up to \$500,000 are available. All applicants must be producers of agricultural commodities or products, including aquaculture and wood lot enterprises. Grants are available for planning and working capital.

### **Biomass Research and Development Initiative (BRDI).**

The USDA and DOE jointly administer the BRDI to provide assistance for research, development, and demonstration of biomass-based products, bioenergy, and biofuels. The intent is to promote greater innovation and development related to biomass. Technical topic areas include feedstock development and production, bio-based product development, environmental and economic performance, integrated resource management and biomass use, and incentive analysis for commercialization. Approximately \$15 million is available for grants in each fiscal year. The maximum grant amount is \$2 million and requires a 20 percent match by the applicant. Pre-applications are due in February and the full applications are due in April.

**Cooperative Services.** For cooperative-owned businesses, there are special programs by USDA that may include grants for projects that support the use of renewable fuels. This may involve a partnership with a nonprofit or university if further research and development is involved. These programs are typically for energy projects involving farmer or producer-owned entities. However, even a utility can access these programs if an alliance with producers is established to provide the necessary feedstock to produce energy.

**Economic Action Program.** The USDA Forest Service has in recent years offered funding for projects utilizing woody biomass for value-added purposes. The Economic Action Program is designed to assist projects meeting the following objectives.

- **Rural Development:** Encourages rural communities through education and seed money to develop natural resource-based opportunities. Emphasis is on addressing community-identified needs and working with businesses.
- **Economic Recovery:** Assists rural communities experiencing acute economic problems associated with changes in natural resource management to diversify and expand their economic potential.
- **Wood in Transportation:** Provides cost saving options to rural communities to rebuild or replace their transportation and recreation infrastructure while stimulating diverse markets for local wood products.

It is uncertain if this program, which historically has been funded at levels of approximately \$25 million, will be funded each fiscal year.

In addition to these USDA programs there are other economic development programs that can be accessed to provide grants, equity, and favorable rates and terms for debt financing. Following is a description of some of these programs.

### DOE Tribal Energy Program Grant

This federal grant program administered by DOE's Office of Energy Efficiency and Renewable Energy (EERE) provides financial and technical assistance to Native American tribes for feasibility studies and shares the cost of implementing sustainable installations that use renewable energy sources on tribal lands. Eligible technologies include the use of passive-solar space heat, solar water heat, photovoltaics, wind, biomass, hydroelectric, geothermal, electric, and geothermal heat pumps. Eligible applicants are tribal governments. The program provides approximately \$2.7 million in funding, with \$1 million going to the Council of Energy Resource Tribes (CERT) and \$1.7 million available for other applicants.

### New Market Tax Credits

Congress created the New Market Tax Credit program to encourage \$15 billion in investments in low-income communities. Qualified Community Development Entities (CDEs) are eligible for allocations of credits and

must apply to the Community Development Financial Institutions (CDFI) Fund for an award of New Market Tax Credits. The CDE then seeks taxpayers to make qualifying equity investments in the CDE. Equity investments or loans are then used to make Qualified Low-Income Community investments in Qualified Active Low-Income Businesses in low-income areas. The investors are eligible to claim a tax credit equal to 39 percent of the total investment in the CDE.

### Revenue Ruling 63-20 Bonds

These tax exempt bonds can be used to provide long-term fixed rate loans for projects with a purpose that is "public in nature." Bonds are issued by local governments on behalf of a nonprofit entity. The political subdivision issuing the bonds must have a beneficial interest in the nonprofit entity while the indebtedness remains outstanding. The political subdivision must obtain full legal title to the property upon debt retirement.

### Tax Increment Financing (TIF)

These bonds are issued by local governments for infrastructure improvements in an area predetermined to be part of a "tax increment financing district." Bond proceeds are used to entice businesses to bring revenue-producing properties to an area. Bonds are retired by the property and/or sales taxes generated by businesses locating in the tax increment district. These bonds are an excellent way to offset the costs of infrastructure associated with a project that produces energy from renewable sources.

### General Obligation and Revenue Bonds

General Obligation/Revenue Bonds issued by the state, county, or municipality provide long-term, fixed rate financing at tax exempt bond rates. With these bonds the government is obligated for repayment of debt that is issued as a means to attract new industry and economic development to an area.

### Federal Home Loan Bank System

Banking institutions can access programs from the Federal Home Loan Bank System that can provide borrowers with long-term, fixed rate loans with slightly lower-than-market interest rates. The justification for these terms and lower rates is the type of jobs being created by the company. These programs are rarely used and not widely known but are available through some lenders.

In addition, this same program can be used by member banks to provide AAA-rated letters of credit needed for many bond and corporate notes issued to fund a project. If a bond program is considered for financing an energy project, an A-rated bank is needed to provide the necessary credit enhancement in order for the bonds to be sold in the marketplace. If an A-rated bank is not available, then local small community-based lenders can use this program to provide an AAA-rated letter of credit for the bonds or notes issued to fund the project.

## State and Local Government Incentive Programs

Probably the best source of funding may be found right at home through your own state's economic development agency. These agencies are in business to attract and create jobs and offer many incentives that can complement private and other governmental programs. Types of assistance available may be in the form of grants, direct loans and loan guarantees, infrastructure financing, tax credits and abatements, and even job training programs for workers.

## Summary

This is a brief review of the types of financing that are available to support woody biomass energy. Of course, other programs and funding sources may exist, and potential biomass program developers should explore all

options prior to beginning any new venture. In addition, organizations should also seek enough funding to make it through the lean times that always occur during the early stages of new ventures. And funds should be sought and set aside for marketing, ongoing product research and development, and other business contingencies.

The lending community's appetite for the use of renewable energy sources has never been greater. However, due to the lack of understanding and the anxiety associated with funding "out-of-the-box" ventures, it is imperative that the entrepreneur use any and all means necessary to buy down the size of the funding needed with tax credits, grants, and other governmental assistance and seek loan guarantees, third party feasibility studies, and other means to mitigate the risk exposure for lenders.

For more information about using wood to produce energy, visit <http://www.interfacesouth.org/woodybiomass> and read other fact sheets, community economic profiles, and case studies from this program, or <http://www.forestbioenergy.net/> to access a number of other resources.

### Authors

*Bruce Crain, President, Crain Consulting, Jackson, MS, and Alan W. Hodges, Associate Extension Scientist, Food and Resource Economics Department, University of Florida, Gainesville, FL.*

