



WOOD^{to} ENERGY



Biomass Ambassador Guide

Plan Activities

In this section we describe how to plan an outreach program to accompany the process of deciding whether or not to use wood for energy. This process has three stages: defining a vision, creating a concept, and developing a plan.

A *vision* is an initial idea held by community leaders about the opportunities that exist for using wood energy in a community. A *concept* requires communication among potential collaborators to develop a basic notion of what a wood-to-energy system might look like given community-specific conditions, interests, and opportunities. This concept should be flexible and might include several options that can give participants a way to compare possibilities. Once a concept is created, more detailed decisions can be made to create a *plan*. A plan includes specific proposals regarding how much wood, what size boiler, long-term contracts for providing fuel, and more. Implementing the plan leads to the actual development of a woody biomass facility. Public input is most useful when the concept is becoming a plan, but public awareness and response can occur throughout the process. Figure 1 illustrates this process. Biomass Ambassadors can help during all the stages.

In the “Building a Team” portion of the “Get Started” section, we suggested that you develop a team and identify a community. The next step is to assess the community to determine if and how woody biomass is being considered; that is, if they have a vision, a concept, or a plan. With this information, you can begin planning a meeting or series of meetings in the community.

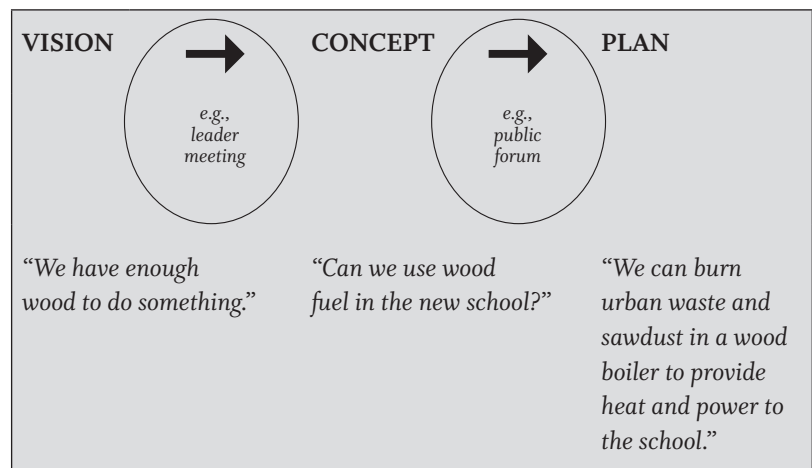


Figure 1. Outreach activities (in circles) help communities use a planning process to decide whether to use wood for energy.

Assessing Communities

Each community is different, and it is important to investigate where your selected community is in the process of considering wood for energy. In your assessment, try to determine the answer to two key questions: Does the community anticipate needing additional power or heat? Do they believe they have a local supply of wood? If both are yes, it is worth asking a few more questions: What is the anticipated cost of the energy resources currently being used? How might the current markets for wood change in the near future? These questions will help you determine if wood energy is possible and feasible. If the initial responses are no, you may wish to speak with additional people and increase the scope of your assessment. It may be helpful to provide some background information to your information sources. You might also ask this question:

Do community leaders want help raising public awareness and engaging residents in discussions about using wood for energy? This may be essential for public utilities and may be wise for proposals that will have significant impacts on local forests, jobs, economic conditions, transportation, etc. We'll talk more about public input later in this section. It may be difficult for individual community leaders to give an enthusiastic yes to these questions; they will wisely want to know more about what they are getting into. Offer to join community leaders for a meeting to discuss woody biomass options and ask them who else should be invited.

If the community is in the process of developing a concept, meet with community leaders and potential wood users to help provide additional information and examples. You may be able to help foster public input. If the community is already developing a plan, meet with leaders to frame the public outreach efforts, and then suggest or help conduct outreach activities to provide information about the preferred options. Your outreach materials may help fill an important need. For example, in Gainesville, Florida, members of the Wood to Energy Outreach Program development team met with several city commissioners to first assess where the community was in the decision-making process about using wood for energy, what their concerns about using biomass were as leaders, and what kinds of information about public perceptions would be helpful. We used this information to design outreach efforts, and provided the commission with a report based on the questions and feedback we got from members of the public. You can find more details about our experiences in the *Gainesville Report* located in the "Appendix."

If woody biomass is not currently being considered, your outreach efforts can help community leaders begin to develop a vision. These leaders may include the city manager, elected commissioners, rural development staff, utility engineers, the urban forester, and residents who are active in the community. Meet with these community leaders individually; introduce them to the idea of using wood for energy. Use fact sheets to introduce basic concepts and case studies to provide examples of different possibilities for using woody biomass. Use community economic profiles that are similar to the target county and help leaders think about how their region is similar or different.

Coordinating a Meeting of Community or Industry Leaders

Each effort to stimulate discussion about using wood for energy may take a slightly different path, but organizing a meeting of community or industry leaders is often a logical first step. The following are some general ideas to consider while organizing your meeting.

Schedule the first meeting at a neutral, comfortable meeting space. A public library, a community college, or an extension office may be able to offer a room for ten to twenty people to meet at no cost. Two hours is probably sufficient for the first gathering; provide coffee and snacks if possible. Your invitation list will depend on what the community is considering. For example, if the perception is that wood supplies are limited but that attracting small industries is important, the chamber of commerce and state

rural development agency may be interested in the economic incentives offered by new businesses generating their own power from wood. Similarly, a progressive community could take pride in using wood to provide heat and power to a school, prison, or industrial park. Some



For more materials that help convey this information, please see the case studies: *Waste-to-Energy Program*, *Wood and Paper Trim the Energy Bill*, and *Power to the People*.

coal-fired power facilities might be interested in learning about modifications for burning wood in order to reduce reliance on fossil fuel. Where wood supplies are large enough and where energy demand is increasing, communities may consider a wood-fueled utility that generates electricity. This meeting can provide the opportunity to connect people who are likely to make something happen. If opportunities are obvious and folks are motivated, the group may begin the creation of a concept.

Invite people to participate in the meeting with an invitation (by e-mail or post) that introduces the purpose and possibilities (Box 2). Some ideas for the types of people you may want to invite to the meeting include the following:

- Foresters who work for large energy companies
- District and regional agency foresters
- Engineers in charge of power generation
- Community leaders and visionaries
- Elected officials
- Regional development people
- Wood industry people, such as those involved with harvesting, transportation, procurement, and processing
- Secondary wood industry representatives (those who generate waste material that can be used for energy), such as mill owners or furniture makers
- Forest industry leaders
- Forest landowners
- City arborists and tree trimming companies
- University researchers or extension specialists in forestry or energy
- Local extension agent in natural resources or community development
- Energy and utility professionals
- Energy policy officials
- Renewable energy experts
- Carbon tax and credit specialists
- Farm Bureau staff who work with farmers with woodlots

The decision of whether to involve local elected officials will depend on the local political climate, current events, and legislative priorities. When meeting with elected officials and other community leaders, it is helpful to consider issues from their point of view. People are more inclined to be receptive to your ideas if you identify the relevance of your issue to them and the community. Pegeen Hanrahan, Mayor of Gainesville, Florida, offers the following suggestions to environmentalists who wish to persuade policy-makers (Hanrahan 2004).



Most people have very busy schedules and will only be available to attend your meeting if you give them plenty of notice. The more advance notice you can give, the better. If you have the time and flexibility, you can even contact people a couple of months in advance and provide two or three possible dates and seek consensus. Box 2 shows an example of a meeting invitation.

Box 2. Sample Wood to Energy Meeting Invitation

November 15, 2006

Dear Howard,

I am organizing a meeting to discuss the possibility of using wood for energy in Laurel County. I am inviting a small group of local people who are interested in discussing potential opportunities. This may be the first of several meetings that will help create a vision for using woody biomass in this community. I would like to invite you to attend the meeting on Tuesday, November 21 at 10:00 am. We'll meet at the Laurel County Tourism office (directions are enclosed). This meeting could be a useful way for you to engage with the community's leadership and members to learn about woody biomass. Please feel free to invite other people who you think might be interested in participating in this discussion. If you have any questions, please contact me at wood2energy@ifas.ufl.edu.

Sincerely,

Martha Monroe
School of Forest Resources and Conservation
University of Florida

“The people who are most effective at shaping public policy offer help to the elected officials, socialize with them, make them feel good about what they are doing, and so on... However, on the matter of image, it’s fair to say that humans are naturally drawn to people who share characteristics with themselves. If your state’s legislature is full of people who wear Birkenstocks and T-shirts, then by all means, dress like that. But if your legislature is full of people wearing business suits or cowboy hats and boots, then you’re handicapping yourself the minute you walk in the door, almost like wearing a big sign that says, ‘You and I don’t have much in common: My values are not your values.’...

“To me, if environmentalists really want to change public policy, then we need to [do the following]:

- Volunteer for [political] campaigns (this is often more valuable than cash).
- Send as your spokesperson someone who already has a relationship with the decision-makers, or someone as similar to them as possible.
- Get your facts straight. Don’t lie or exaggerate.
- Be nice, initiate social contact, attend mixers, and join clubs that the decision-makers are in.”

Develop an agenda for your meeting. If you are providing the very first start of a vision, you should be prepared to do most of the talking. If others have considered using wood, you might want to ask them to provide their perspectives and thinking. Consider asking

industries or facilities in the region who currently use wood for energy to present their activities as a case study.



If one industry is planning to develop a wood-fueled system, it is not likely to want competition for its energy source. The staff may not appreciate an open meeting with the competition to explore using wood for energy. In that case, ask the industry leaders how you can support their process. If the industry leaders believe that public input could be helpful to their proposal, they may ask you to help with an outreach effort. If the industry leaders would prefer to have more of their own staff understand the opportunities that woody biomass could bring, you could offer an in-house presentation.

Box 3 features two sample agendas that could be used to introduce people to the concept of using wood for energy. Please refer to the “Presentation” section of this guide and the CD for an example of a slide program for an introductory meeting.

Following the Meeting

If the meeting results in a sense that there is no interest or opportunity for using woody biomass in the community, you can either drop the idea and begin working

with a different community, or speak to different people and hold another meeting. You’ll have to use your judgment and make sure you’re neither giving up too easily nor trying to force the idea in a community that’s not suitable or receptive.

If the meeting seems to indicate that opportunities and interest exist in the community, it will be important to develop some action steps and follow up with contacts. They may wish to hire a consultant to conduct a woody biomass feasibility study. Such a study should include an analysis of wood supply, cost, sustainability, technology for combusting the wood, public perceptions and opinions, potential competition, and economic impact. The resources provided in this guide may be useful but are not sufficient to generate such a study. They are meant to suggest possibilities. If the community is more interested in attracting a new industry by offering a local, sustainable energy resource,

Box 3. Sample Meeting Agendas**One-person presentation format:**

- Welcome invitees at the door, provide name tags and snacks
- Introduce the topic, yourself, and ask everyone to introduce themselves, sharing their affiliations
- What makes this location good for woody biomass?
 - Wildland-urban interface, nearby forest resources, and growing need for energy
- Benefits of using wood for energy
 - Carbon neutral, cost, support local forest landowners, use “waste” resource, jobs
- Concerns about using wood for energy
 - Cost, new systems of harvesting and transportation, unfamiliar technology, sustaining local forests
- Examples of where wood is currently used for energy
- Local supply or relevant examples of supply
- Local economic impact or relevant examples of impact
- Elements to consider in your woody biomass system
 - What source (urban, forestry residue, whole tree), competing uses, how large and long-term, how transported (truck or rail), how processed (chips, pellets, Bio-Oil, or gas), ash disposal, how sustainable forest management is guaranteed

Team presentation format:

- Welcome folks at the door, provide name tags and snacks
- Introduce the topic, your speakers, and ask everyone to introduce themselves
- *Speaker 1:* Our community, current energy sources, anticipated energy needs
- *Speaker 2:* Our forest resources – now and in the future
- *Speaker 3:* The benefits and concerns associated with using wood for energy
- *Speaker 4:* How industry already uses wood for energy
- *Speaker 5:* The potential in this community
- Questions and discussion

the concept, plan, and feasibility study may be delayed until such an industry is available and is able to participate in the development of a plan. At that time, the industry might well be interested in obtaining public support, and the assistance of a Biomass Ambassador could be critical to enhancing public awareness.

The results of your meeting will determine the next step of your outreach efforts. If a vision was defined, it may be necessary to organize a second meeting with community and industry leaders to help create a concept. Again, the development of a concept should involve all potential collaborators and may include several options. The concept is meant to provide a loose framework of what a wood-to-energy system might look like while remaining flexible enough to incorporate new ideas in response to public ideas and concerns.

Is Public Input Needed?

Whether the community is actively discussing plans for woody biomass utilization or you’ve just helped facilitate the development of a vision, the next step is to determine if public input is needed. While it is best to have a concept in place before involving the public, knowing early in the process whether or not the public will be involved may help you design an effective outreach effort. It may also influence the development of a



If the public is to be engaged, it is important to notify them about the project and involve them in the creation of a plan early on in the process. If people are first notified about a project once it is ready to be implemented, they may resent not being able to provide input.

concept. This decision can depend on several factors such as size and ownership of the facility, local public perceptions, and activist groups. Large utilities may wish to involve the public. Projects that will have noticeable impacts on local communities socially, environmentally, or economically will probably be best designed and most well received if the public is involved in the planning stage. If a small, private system is on the drawing board, public input may not have much influence. If there is organized, vocal opposition to using wood for energy within the community, however, public input may still be useful.

Public support, or lack of it, can have a tremendous impact on the outcome of a wood-to-energy proposal. For example, in North Wiltshire in the United Kingdom, a utility company proposed a 5.5

megawatt plant to power 10,000 homes using advanced gasification technology. Local people worried about negative effects to the local environment formed an action group called Biomass Lumbered on Our Town (BLOT) to stop the proposal. Using letter campaigns and surveys, residents convinced the North Wiltshire District Council to reject the proposal. The utility company's appeal was also dismissed (Upreti and Van der Horst 2004).

Conversely, in Burlington, Vermont, citizens were engaged in a process of determining how best to use local wood for energy. They were given options of how a system would be set up and created additional options. In the end, they approved a system that would use woody biomass from timber stand improvement activities that would be shipped to their urban utility by rail at specified times of day to reduce impact on traffic. See the case study, *Power to the People*, for more information.

Whatever your role in public engagement, work to make sure that the public's concerns are addressed and their questions are answered. The questions that we were asked in our community forums are listed in the *Gainesville Report* in the "Appendix." A variety of methods for communicating with the public are described in "Outreach Tools." Community forums may be particularly effective for gaining public input during the planning process.

Public Perceptions

If public input is needed and you don't know whether the public supports the idea, it is appropriate to find out. We've found that people generally don't know much about using wood for energy. More than half (54.5 percent) of the respondents to a mail survey of single-family and mobile home owners around Gainesville, Florida, considered themselves to be "Not at all knowledgeable" about converting wood to electricity. (The *Citizen Energy Survey* and *Gainesville Report* in the "Appendix" contain additional information.) This lack of knowledge also surfaces in questions where respondents are asked to compare wood to fossil fuel energy sources with regard to various issues (e.g., air pollution and worker safety). It is difficult to have a productive discussion or address anything other than emotional presumptions when the public is not knowledgeable about a subject. This general lack of knowledge about woody biomass indicates a need for public outreach and education.

You can investigate public perceptions in the community to see if they resemble our Florida findings. You can research local public perceptions with a randomly distributed survey, with a poll in the local newspaper or utility bills, or in a focus group. You can ask elected officials what input they've had from their constituents about the idea of using wood for energy. You can even write a letter to the editor of the local newspaper, suggesting that using wood for energy might make sense for the local community, and monitor people's responses in subsequent published letters. Any information you can gather on how people feel about using wood for energy will be beneficial. You will want to gather information such as the following:

- What do residents know about using wood for energy?
- What misconceptions do they have?
- Do they know what fuel sources are currently used to produce their energy?
- What is their first impression about the idea?
- Are they curious? Scared? Interested? What worries them?
- What do they value about forests?
- Do they think forests can be managed or harvested without destroying them?

Even if you think you know what the local public perceptions are, doing a little more research to confirm your thoughts might be a good idea! Another technique is to begin a presentation by formulating questions to gather the kind of information expressed in the previous list of questions. Use the information you gain from researching the public perceptions to develop your outreach goals. Once you have worked with others to develop a concept for using wood for energy, you are ready to share it with the public and get their help in developing a specific plan. But first you must decide what outreach tools will be useful, and that requires developing your objectives.

Goals, Objectives, and Your Audience

Before you organize an outreach effort, it is helpful to define your goals, develop some objectives, and identify your target audience. A goal is an overarching statement or purpose that guides your outreach efforts; objectives are more specific and measurable descriptions of what you want your outreach activities to accomplish. Objectives are often helpful in defining your audience. For example, your goal might be to raise community awareness about using wood for energy. Your objectives might be to (1) introduce Earth Day festival attendees to the idea that wood can be a sustainable, renewable source of energy; (2) inform local business owners that wood can be cost-competitive with fossil fuels; and (3) educate neighborhood association members about the functions of basic wood-to-energy facilities. These objectives help define the target audience, which in this case would be Earth Day festival attendees, local business owners, and local residents.

Selecting Outreach Tools

The suggested outreach tools in the next section have been categorized according to three general outreach goals: raising community awareness, increasing comprehension, and engaging the public. Within each category, a variety of outreach tools are available for use. Activities in the first category of raising awareness (Table 1) tend to distribute basic information to large numbers of people, often through mass media. Activities in the second category are opportunities to meet with people in workshops or interactive presentations. These are likely to build understanding with two-way communication techniques. Activities in the third category provide information and answer questions,

provide imagery and examples, and may provide an avenue for people to express their ideas to decision-makers.

Your goal may lead you to decide which outreach category might be useful and your objectives and target audience will help determine which specific outreach tools will be most effective (see the “Outreach Tools” section). For example, if your goal is to engage the public in discussions about using wood for energy, you will begin by considering the

Table 1. Overarching Outreach Goals and Suggested Outreach Tools

Goal	Suggested Outreach Tools
Raising Public Awareness	Community Web site Dear neighbor letter Information booth Letter to the editor Media opportunities Newsletter Posters and signs Public access television Residential mailing Special event
Increasing Comprehension	Brochures or fact sheets Community field trip Conference presentation Presentation for a city or county commission meeting Symposium
Engaging the Public	Community forum Discussion group Learning network Study circle

tools within this category. Your specific objectives about how to gain public input on a facility’s proposal might lead you to organize a community forum. Remember to use what you learn about public perceptions to guide your selection of outreach tools.

In thinking about which outreach tools best suit your audience, consider how much time they are likely to have to devote to learning about wood for energy, how much background knowledge they have, and what level of interaction is likely to be most appealing. For example, if your audience consists of all members of the target community, you will want to choose tools that are easy to produce in large quantities, can be quickly read or observed, and are not overly technical. Simple fact sheets, brochures, or residential mailings might be suitable. A Web site can be accessed by lots of people, but it would need to be advertised in order to be effective. If you are communicating solely with community leaders, you may want to select attractive, succinct, and eye-catching handouts with more technical information. Because they receive lots of e-mails and written material, leaders may be more receptive to personal visits or formal presentations at public meetings. If your audience is a small group of industry leaders or folks

with a vested interest in using wood for energy, a field trip to a wood-powered plant followed by a discussion group might be most appropriate.

Some outreach tools are much more time consuming and resource intensive than others. Be realistic when estimating what you will be able to contribute to your outreach efforts. Developing a Web site or video might seem like perfect approaches for your audience and objectives, but only if you have the resources to complete them. Instead, using already developed fact sheets, brochures, and Web sites can save time and money. Table 1 describes which outreach tools may be most effective for achieving certain outreach goals. The “Outreach Tools” section provides more information about selected outreach tools.

References

- Hanrahan, P. 2006. Excerpt from letter from Mayor Pegeen Hanrahan of Gainesville, FL to Grist. Grist Newsletter. <http://www.grist.org/comments/interactivist/2004/10/18/hanrahan/index1.html> (accessed August 6, 2007).
- Upreti, B. R. and D. Van der Horst. 2004. National renewable energy policy and local opposition in the UK: The failed development of a biomass electricity plant. *Biomass and Bioenergy* 26: 61-69.

