

ECOCHAR

COMMERCIALIZATION



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- Without a doubt, the greatest hurdle for biochar to become accepted as significant is the ability to make it a commercial product.
- Commercialization involves several factors, but the main hurdles involve establishing a value, proving you can provide a consistent quality product, and supplying the volume that is required by the marketplace.
- Most importantly, it is critical not to “overhype” the product. There are some amazing benefits that chars provide; it is not necessary to exaggerate them.

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- While biochar itself has been around for centuries, it has been in the past 12 years or so that it has been truly “rediscovered.”
- With this renewed interest has come a flurry of testing and research, as well as a great deal of interest and support from a variety of organizations.
- These are all important steps in the process, but there is a huge leap from R & D and testing to the actual development of a commercial product.

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- That final step to commercialization is by far the most difficult, and requires a significantly different approach.
- The commercialization of a “new” product makes the task even more difficult.
- The need to show value and, at the same time, demonstrate quality control and volume of product is almost an impossible task.
- It is the “chicken and egg” scenario – you need an established value to justify producing large volumes of product, but you can’t establish value until you can show quality and quantity of production.

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- Once that has been accomplished, the path to commercialization is still not over.
- The decision needs to be made whether you are going to handle the production and quality control, or simply focus on marketing the product.
- Our development of Ecochar has encountered additional hurdles.
- Early in our development, we made the decision to focus on feedstocks other than wood.
- While we can easily gasify wood, the opportunities and benefits from processing other materials are much greater.

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- Producing Ecochar from feedstocks such as manures means we have a unique product, though not one that was initially recognized by people familiar with biochar.
- This is evident by the fact that IBI itself developed a standard for “biochar” that completely excluded any chars made from higher ash materials, such as manures.
- Ecochar also has characteristics that make it perform differently than wood chars.
- I tell people that we have good news and bad news:
 - The good news is that we really don’t have any competition in marketing Ecochar, as there are not any other large scale manure char facilities.
 - The bad news is that we really don’t have any competition – that means all of the research and data collection on a large scale is up to us.

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- Assuming that the product can be made consistently and of good quality, there are still many issues to face.
- Ecochar has some amazing characteristics; having multiple applications, however, can be a blessing or a curse.
- It can be used as a soil amendment, feed supplement, water filtration medium, odor control device, animal bedding component, and in heavy metal remediation.
- We have also tested it successfully as a component in a formulated fertilizer, and as a partial replacement for peat moss in mushroom substrate casing. There are also various uses that others are finding for chars as activated carbon replacements.
- So, if you are developing a commercial product, which of these do you develop? There is a cost associated with each, and chasing too many at one time may be an impossible task.

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- Selecting a strategy and staying focused on it is critical.
- However, once you have everything in place, there is probably the biggest step to make – commitment.
- Devoting the time, resources, and money to truly become commercial is a huge leap.
- It is an easy decision to conduct the research and dabble in selling a product. Grant funding is available to pay for this work, and the cost is relatively minimal in comparison to becoming commercial.
- Nobody wants to fund commercial efforts – unless they want equity.
- It may have huge rewards, but it also comes with huge risk, and huge disappointments.

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- It is very frustrating to test a product and provide results that demonstrate it is clearly superior and, in many cases, vastly superior, only to have the results ignored.
- People resist new products, especially when they are told otherwise by large corporations with recognized names.
- This doesn't stop the product from being accepted, but it certainly increases the difficulty.
- Bottom line – the road to commercialization is not easy and requires preparation, resources and a commitment to carry through, as there will be challenges.