

Biochar

Malcolm C., 12th Grade

What is Biochar?

Biochar is a lightweight, fine grained, charcoal like material that is rich in essential minerals. Most of its composition is carbon.

The name Biochar comes from the process in which it is made.

Biochar is organic waste that has been burned until it is a coal like substance.

Biochar is showing to be one of the best and most **sustainable** crop fertilizers. It also **regenerates soil!**



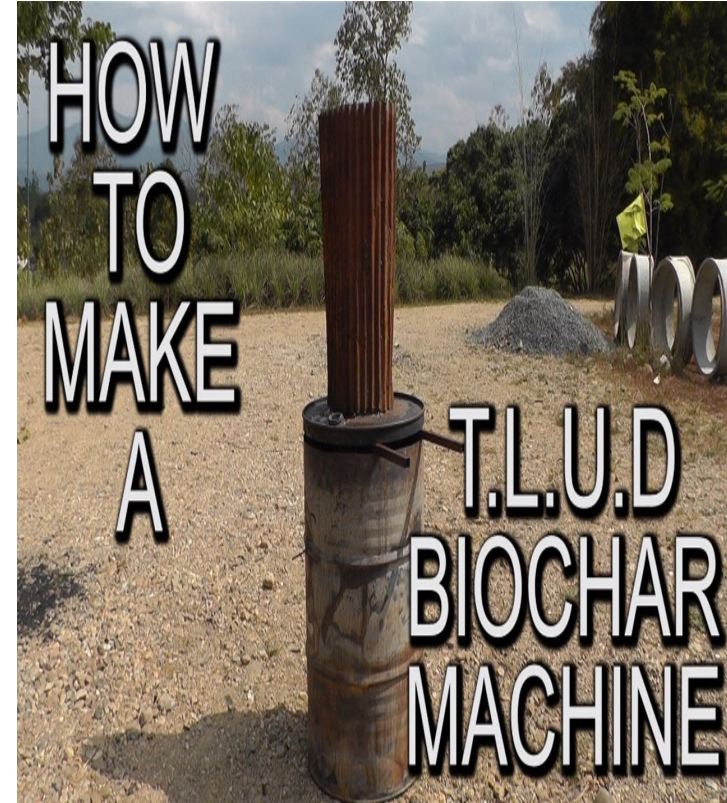
How is it made?

Biochar is made from taking **organic waste or biomass, such as fallen leaves, dead branches, and wood chips**, and burning it, at a high temperature, until it changes form. This process is called *pyrolysis*.

Since biochar is made from organic waste, it doesn't have the terrible smell that normal fertilizers have.

Although there are machines that are made with the purpose of making biochar, it is easy enough, that you can make it in your own backyard. [CLICK HERE](#)

Top lit “up” draft.



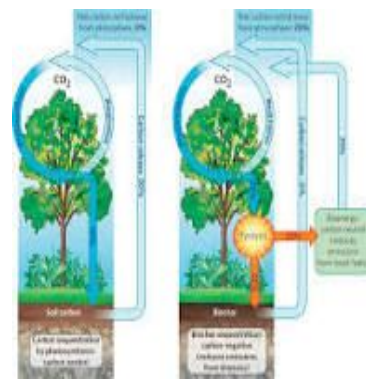
Biochar Sustainability

One of the most important parts about Biochar is its ability to **retain carbon**.

Biochar creates **stable carbon structures** that **remain in the soil**. This carbon is not released for hundreds or even thousands of years.

The ability of Biochar to **make plants grow larger** means **lower CO2 levels**.

Burning animal waste creates larger CO2 levels opposed to Biochar that doesn't give off CO2.



Biochar's Secret Weapon

Biochar also has a completely different purpose that has nothing to do with agriculture.

As you already know, Biochar is created when biomass is burned for a long enough time, but what you don't know is while Biochar is being made, so are combustible gases.

Although this sounds dangerous, these **gases are converted into clean and renewable energy for whole communities!**

The by-product of making Biochar is electricity!

What Can We Do?

“Currently, there are about 30 operational biomass plants, generating about 640 MW of electricity. In 2017, biomass energy accounted for 2.82% of the states energy production.”

Biochar is still a relatively new development, even though practices of this nature can be traced back 9,000 years, to Native Americans.

Biochar is revolutionary in its ability to lower CO2 levels, increase plant fertilization, and create sustainable energy. This could be the next step to restoring our planet, but we need to raise more awareness!

If we can get people to know, at least one of the many great things Biochar can do, I'm sure they will hop on board!

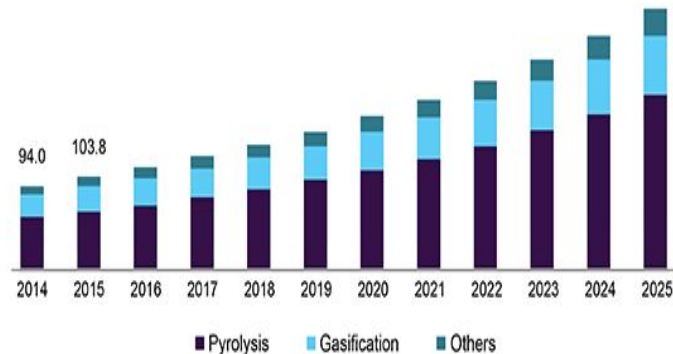
Advocation

As you can see, Biochar is only recently becoming a popular practice, and it needs more recognition.

There are many ways to support Biochar, even just from home. If you have a garden or even potted plants, use Biochar! This is a great way to make sure plants will grow a healthy size, without any GMOs, while also **protecting our planet**.

I am currently trying to get the New York Parks Department to switch over to using Biochar, and hopefully, we will soon have Biochar in every park!

U.S. biochar market demand, by technology, 2014 - 2025 (Kilotons)



Source: www.grandviewresearch.com

Buy and Use Biochar.

