



TripleGreenEnergy.

BIOMASS POWER NEWS

TripleGreenEnergy. Newsletter

November 2013

Advantages of Biomass Power

Using wood or straw biomass as a fuel is a simple way to greatly reduce your carbon footprint. Biomass is available in many different forms in different locations and often can be obtained at very low costs. Many landfills are being filled by paying customers looking for a place to dispose of wood, cardboard and much more.

Common concerns about biomass

If you are thinking of making the switch, you probably want to know!

Q: Will I save money?

A: Heating with biomass can most certainly cut costs on your heating bill, you will have a payback period in which a biomass system will pay for itself.

Q: How complicated is it to switch?

A: We can connect into any existing water heating system. If you do not have a water heating system, we can install radiant heaters with fans that are very simple to install.

If you would like more information on how you can power up with biomass, please contact Rod at TripleGreenEnergy.

“These biomass systems can replace current coal burning units with ease. Instead of releasing old carbon, recycle carbon from new plant growth and reduce your carbon footprint ...”

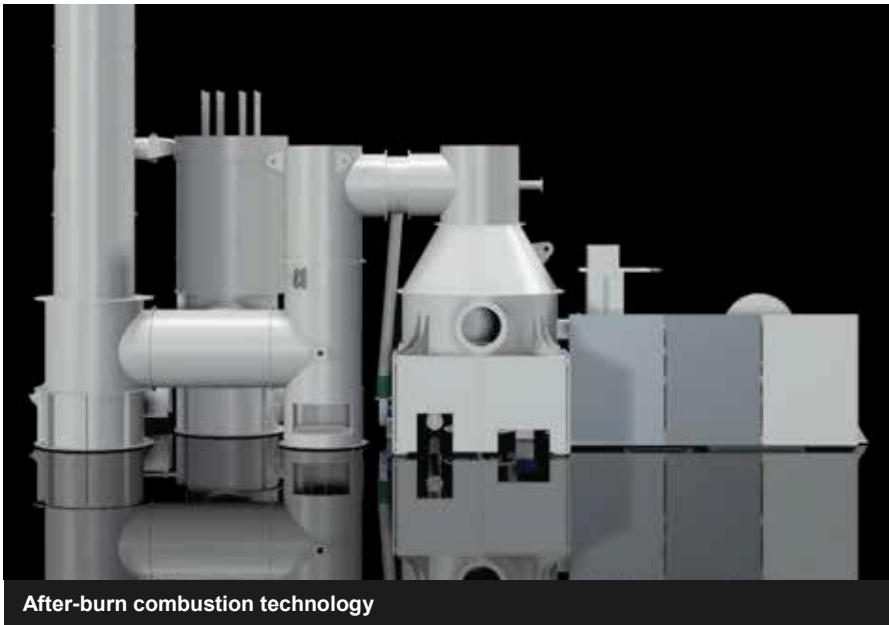
- Raymond Dueck



3 MM Btu furnace

TGE-3000

- Clean & Compact
- 5 year full warranty
- 3 Million Btu
- Silica trapping & containing
- 50+ Kwe capability



After-burn combustion technology

Electricity from Waste?

Using new technology in the form of an organic rankine cycle generator, biomass combustion heat can also be utilized as electricity.

We are currently working on pairing our biomass heating unit with state of the art steam and organic rankine cycle generator technology. Our expectation is to produce in excess of 50 Kwe from our 3 million btu furnace system. We plan to demonstrate this in January 2014.

We'll keep you posted!

Using MSW as fuel

Why do we continue to fill our landfills with municipal solid waste that can be used as fuel? Lets take action and begin to utilize these fuels as a reliable energy source to heat communities, and power the same homes.

Given our proprietary two stage combustion burns at temperatures in excess of 3000 degrees Fahrenheit, and that we have a 1 second dwell time, this system can be used to dispose of any combustible matter without the risk of highly toxic emissions.

Testing is an ongoing process, as we determine which fuels can be used, and at what ratio.

We have successfully demonstrated the ability to use wheat straw and flax straw as viable fuel sources. As we continue testing, we will release our results. Currently we working towards testing of miscanthus, and phragmites.



ORC Generator

What biomass is locally available?

With our automated programmable system, we are able to utilize many different types of biomass for fuel. Often communities have different types of biomass available for free, or for very little cost. If you have local biomass available and are unsure if it might work with our system, please give us a call.

Whats in it for me?

Many provinces and states have grants and funding available for switching to renewable energy sources. If are considering one of our systems, we will go to work for you and try to find local or federal funding available for your project.

There are also carbon credit programs that fund projects like this. We are currently developing partnerships with some of these programs to become eligible for this type of funding



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Greenhouse heating from phragmites?

Invasive *Phragmites* stands are extremely dense, with up to 200 stems per square metre. Individual plants can grow up to 5 metres tall. This makes these invaders an excellent choice for using as biomass fuel. The density at which they grow can provide a high yield of energy from a much smaller area of land. Phragmites has similar properties to Miscanthus which is a purpose grown biomass.



Photo Caption

Miscanthus

Purpose grown biomass

Miscanthus has been used in Europe for many years as a biomass fuel. This plant can grow more than 3.5 meters in one season. This plant can also yield approximately 10 tons per acre per growing season.

Miscanthus is very versatile in that it can be used in many different forms of fuel. It can be combined with coal up to 50% in existing coal burning furnaces. This plant can also be used to produce ethanol and other biomass fuels. Using it in our TGE furnaces, it can be used as a primary fuel source for heat and electricity energy.

Because Miscanthus has such a high yield every growing season, and does not need to be replanted, it is a very economical way to produce usable biomass for energy. Some growers claim it can be produced at \$2.00 per million Btu. This makes Miscanthus a strong competitor for even Natural Gas.

If you are considering switching to biomass energy, please feel free to contact Rod at TripleGreenEnergy. We can discuss what biomass sources are most available to your particular location, and calculate whether it could be a viable alternative to your current fuel supply.

Reduce your carbon footprint

Fuel for thought

So how does using biomass fuel instead of coal, natural gas or propane actually reduce your carbon footprint?

When you use a renewable fuel source such as feedstock or wood, you are releasing carbon materials that have been absorbed in the lifetime of their growth. ie: Wheat straw is an annual crop, so the carbon it releases was absorbed in a recent growing cycle.

Using coal or natural gas releases carbon that has been stored for thousands of years and increases the carbon load on our atmosphere.

Valuable Carbon Char

When using our patented two stage combustion after-burn technology, you greatly reduce your carbon footprint by gasifying your fuel. In this process you can take out up to 15% of your raw fuel as a usable carbon char. This char takes up to thousands of years to decompose, releasing nutrients back into the soil for future plants to grow. This by-product is a very powerful natural fertilizer making even the worst soils fertile.

Using this technology you can actually remove more carbon from the atmosphere than you immediately release back into it. **Imagine that!** An energy system with an output that reduces atmospheric carbon load as it operates.

Contact us today to find out how you can **Power Up** with TripleGreenEnergy.

TripleGreenEnergy brings you Solutions!

Contact Us

Give us a call for more information about our services and products

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Visit us on the web at
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Units available:

TGE-200, 0.2 million Btu

TGE-400, 0.4 million Btu

TGE-1000, 1 million Btu

TGE-3000, 3 million Btu

TGE-6000, 6 million Btu

TGE-9000, 9 million Btu



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