

What is Biomass Energy and How Would It Benefit Oregon?

Biomass energy is most of the energy on the planet. It is life, or the remains of life, converted to energy.

Fossil fuels were once biomass but over thousands of years became fossilized into petroleum, natural gas and coal.

When we see wildfires ravage Oregon each year, that is the uncontrolled release of biomass energy. It is a lot of energy too, the equivalent of multiple atomic bomb detonations each year nationwide.

It could be controlled. Dead wood and duff, the leaves and stems that litter the forest floor, could be burned in a controlled way so humans would gain electricity without polluting the air and water. This process is called wood gasification.

Yard debris too, which are routinely collected by waste management, could be burned to produce heat that then creates electricity.

This would be clean and renewable energy as wood gasification is a well established science such that the smoke is recycled through the incinerator over and over until there is virtually no pollution—none in the air or water.

This type of biomass energy is called biochar.

But the real goldmine for biomass lay in biogas, where waste food and agriculture are brewed to maximize and condense methane gas which is then combusted to create electricity.

Neither biochar nor biogas is new science and both have long proven to create significantly more energy than required to produce them.

In 2021, the nation of France implemented a biogas program and within a year it was set up to become a full third of all renewable energy produced there.

In fact, for most of human history, the combustion of biomass has been how civilization was powered. In 2021, France has proven its still viable creating 4.3 trillion watt-hours of energy.

We've largely forgotten about this science and become dependent on fossil fuels which are exceedingly more toxic and so cause health problems more dangerous than even global warming.

More than the health benefits of using our waste food and yard debris to create clean and renewable energy, there is the more immediate result of saving money and creating wealth.

Our supermarkets in Multnomah County are huge and they generate tons of waste.

Because of expiration dates and market demands, each supermarket generates copious waste that could be converted to biomass energy. This isn't a difficult logistics problem; but we lack the infrastructure to receive it.

Reducing operation costs for these supermarkets and larger restaurants by developing biomass energy infrastructure, building that workforce, creates a multisector economic benefit.

Our forests too could be better managed to minimize wildfires with robust biomass development in smaller rural towns collaborating with loggers and forest managers.

The energy from biochar fuel compares to coal and the energy from biogas compares to natural gas. The infrastructure required for biomass is significantly cheaper than other forms of renewable energy and biomass doesn't require good weather like solar and wind.

In fact, Oregon has so much potential biomass energy, capitalization on it would rival Bonneville and that robust hydroelectric project.

There is a super abundance of waste food, agricultural waste, dead wood and duff in Oregon.

Why ignore this super abundance of fuel and ignore its potential danger when ignored?

Biomass energy projects reduce waste, using the methane that would otherwise contribute to global warming. It is better than other forms of renewable energy.

There is no comparison between biomass and fossil fuels. Biomass is clean. Fossil fuels are poisonous.

Multnomah County is well positioned to lead Oregon and follow after the French example in biomass.

No state has yet stood out as the clear leader in biomass energy. No state is known for being the biomass state. Why not this for Oregon and Multnomah County leading the way?

The Oregon Food Bank generates so much food waste, spoiled food, they did a feasibility study to see if they could get their own biomass project going; but it was too far outside their scope.

Biomass, however, is not outside the scope of government. It is job and wealth creation to improve the environment. There are even biomass companies in Oregon already, to help.

In fact, the development of biomass energy is the only way the state and cities might achieve stated clean energy goals. Biomass is the future.