

From: [REDACTED]
To: [Benton County Talks Trash](#)
Cc: ["Sam Imperati"](#); [REDICK Daniel](#); ["Ken Eklund"](#)
Subject: Waste to Energy Conversion Benton County Talks Trash Workgroup
Date: Sunday, September 11, 2022 7:07:16 PM
Attachments: [Waste to Energy Benton County Landfill Resource - Benton County Talks Trash Workgroup.docx](#)

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Hi Daniel

If you would be kind enough to include my letter for the next meeting of Benton County talks trash workgroup, I would appreciate it.

Thanks.

Chuck

Chuck Gilbert

Member of Benton County

9/11/2022

Waste to Energy Conversion

Benton County Talks Trash Respectfully Workgroup

Via email: bentoncountytalkstrash@co.benton.or.us

Merit aside, sustainability is the tenet and goals of Counties of Oregon as well as the State of Oregon.

“Sustainability” is simply defined as using, developing, and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic, and community objectives. ([ORS 184.421](#))

In supporting sustainable communities, state agencies shall seek to enable and encourage local communities to, in part, [ORS 184.423](#) subparagraph (j) efficient use and reuse of resources and minimization of harmful emissions to the environment.

Merit aside, landfills are a resource of the State of Oregon.

Oregon DEQ shifted from Solid Waste Management to Materials Management for sustainability.

Oregon DEQ’s [materials management](#) takes a holistic view of environmental impacts across the full life cycle of materials, as well as actions that can be taken to reduce those impacts. It includes resource extraction and use of recovered materials, the design and production of materials, their use, and end-of-life management, including solid waste disposal and recovery.

Stepping back for a moment, landfills possess the synergy for the integration of solid waste disposal and green energy recovery.

A landfill is simply a solid waste battery that has the potential energy of converting waste to energy.

One ton of solid waste has the potential to produce 60 gallons of fuel.

With an average of 1 million tons of solid waste being slated for delivery to Coffin Butte landfill, then the potential is to produce 60 million gallons of fuel.

Alternatively, one ton of solid waste has a similar net effect of producing megawatts of electrical power.

Equally important in the solid waste disposal and energy recovery are technologies that can convert waste to energy with acceptable net-zero emissions goals.

Put simply, the term net zero applies to a situation where global greenhouse gas emissions from human activity are in balance with emissions reductions. At net zero, carbon dioxide emissions are still generated, but an equal amount of carbon dioxide is removed from the atmosphere as is released into it, resulting in zero increase in net emissions.

As a model, the City of Lancaster in California, host, and co-owner with 2% of a 50-million-dollar plasma gasification plant being built, owned, and operated by SGH2 Energy for wastepaper and waste plastics from municipal solid waste for conversion to hydrogen fuel.

The model also brings Iwatani, Japan's leading hydrogen industrial gas company and a developer of hydrogen refueling stations (HRS) in California for the [launching](#) of California's first closed-loop green hydrogen ecosystem for transportation.

It is not the intent here to opine the merits of one company over the other now, but merely give credence to the fact that viable technologies are at hand for working collectively with Benton County's landfill resources to convert waste to energy.

In this respect of reducing waste, the life expectancy of the landfill will be increased.

As the workgroup progresses, I appreciate the opportunity to hopefully provide positive alternatives for the workgroup's consideration for reaching their goals.

Thank you.

