



CDC's Waste-to Energy Recycling Program

Turn your used FLAVIA® filterpacks, Keurig® K-cups and Lavazza cartridges into energy!

Flavia, Keurig and Lavazza coffee and tea packets are full of usable energy and foil that can be recycled. Unfortunately most refuse haulers bring their waste to landfills.

We at CDC have come up with a better idea. We have teamed up with our local waste-to-energy power plant, Covanta, to provide you with a convenient, cost efficient way to recycle your used coffee, tea and cocoa packets.

Here's how it works:

- Please let us know if you choose to participate in this recycling plan, by approving the program agreement.
- Return your used packets in a dedicated trash bag to our driver whenever you receive a delivery.
- The cost of recycling will simply be added to your invoice when you order product, at a recycling fee of less than a penny a pack.
- CDC will donate 100% of this recycling fee to the "Adopt a Highway" Program, helping to keep our local highways and environment clean.

Recycled Products, Increased Energy, and Clean Highways – We All Benefit!

The Energy-from-Waste Process



1
It starts with trash from the home that is put curbside for disposal.



2
A truck picks up MSW from around the community and unloads at an EfW facility.



3
Waste is combusted at a high temperature, creating steam that turns turbines to generate electricity.



4
The result: For every 10 tons of MSW, 5,200 kWh of power are generated and 500 lbs of metal are recycled.



5
Electricity is fed back into the grid and is used to power homes and businesses.

Energy-from-Waste (EfW) or waste-to-energy (WTE) is a process that takes municipal solid waste –including plain old household trash -- and transfers it into combustion chambers where it is reduced to 10% of its original volume in the process. The heat generated from the combustion chambers heats up water in steel tubes that form the walls of the combustion chambers. The water is turned to steam and sent through a turbine that continuously generates electricity.

Over the past 25 years, the EfW industry has developed state-of-the-art technology that makes EfW one of the cleanest forms of energy generation. The Energy Policy Act of 2005, Department of Energy and 23 states have classified EfW as a renewable technology, and the Department of Energy states that turning garbage into energy makes “important contributions to the overall effort to achieve increased renewable energy use and the many associated positive environmental benefits.” The advanced technology in combusting waste is the air quality (emission) control system. Energy-from-waste facilities meet or exceed the strictest federal standards set by the U.S. Environmental Protection Agency (EPA) and employ a multi-step process to achieve superior environmental performance.

Greenhouse gas

Greenhouse gas emissions are primarily linked to energy consumption, such as the combustion of fossil fuels for energy generation and transportation. Energy-related carbon dioxide emissions, resulting from petroleum, coal and natural gas, represent 82% of total U.S. human-made greenhouse gas emissions.

Methane is another greenhouse gas, and at more than 20 times the potency of carbon dioxide, methane is ranked as a dangerous contributor to global warming. The largest source of methane emissions in the United States is landfills, but methane is also emitted from coal mines, oil and gas operations, and agriculture. Approximately 18% of global warming is due to methane emissions in the atmosphere. Methane emissions from U.S. landfills pose a significant danger because our increasing trash generation sends more municipal solid waste (MSW) to landfills each year.

Preventing climate change with Energy-from-Waste

Energy-from-Waste facilities avoid the production of methane while producing significantly more electricity from each ton of waste compared to landfills. On average, EfW produces 520 kWh from a ton of waste and only 20 kWh per ton comes from landfills. This energy production from EfW offsets greenhouse gases from fossil fuel electrical production.

It is estimated that for every ton of trash combusted in modern Energy-from-Waste plants, nearly one ton less of carbon dioxide equivalent is released into the air due to avoided methane from land disposal, fossil fuel power generation, and metals productions. Using the Environmental Protection Agency model, it can be estimated that Energy-from-Waste facilities in the U. S. annually avoids the release of 30 million metric tons of carbon dioxide into the atmosphere.

One strategy endorsed by the report is to “de-carbonize” the electric power generation industry by shifting to non-fossil fuel based energy sources, specifically including energy-from-waste. This follows the Energy Policy Act of 2005 which confirmed energy-from-waste was renewable. The GROCC sustainability statement also recommends “efforts to reduce global emissions of methane from landfills should be expanded, including increased use of waste-to-energy facilities where appropriate and cost effective.” This endorsement supports Covanta’s view that waste-to-energy should be counted as a GHG offset, particularly since the methane produced from landfilling has far greater global warming impact than carbon dioxide.

http://www.covantaholding.com/efw_101.shtml