

The Vegawatt: Transforming Waste Vegetable Oil Into Electricity & Hot Water.



A Vegawatt™ system contains more than just power generation equipment. It includes a turn-key waste vegetable oil (WVO) refinery, automatically transforming the darkest, nastiest used cooking oil into fuel appropriate for power generation.

Vegawatt™, the innovative new cogeneration system for restaurants and food service facilities, uses waste cooking oil as a readily available source of fuel to generate on-site electricity and hot water, saving thousands of dollars as well as providing a clean, renewable source of energy.

The unit, which is about the size of a refrigerator, is placed outside the building the same way central air conditioning units often are. It hooks up through one electrical cable to the electric system. There is also a hot water feed and return system. Your hot water heater won't have to work as hard now because the water has already been partially heated by the system.

Used cooking oil from a restaurant is deposited into the Vegawatt™ in the same way the restaurant currently deposits waste vegetable oil into a oil barrel or dumpster. The used cooking oil undergoes an automated 4-stage cleaning process. This patent pending process creates a very clean fuel while using no additional energy input.

As a biofuel generator, the Vegawatt™ is harnessing chemical energy that was captured in a farmer's field during the last growing season. This is in contrast to utilizing fossil fuel that captured energy millions of years ago. As we are releasing energy that was captured only last year, with a view over that time period, it can be said that a Vegawatt™ does not add any CO2 to the atmosphere.

Generate Clean Energy

The useful life of waste vegetable oil is finite. After being thoroughly used in the deep fryer, waste vegetable oil (WVO) has traditionally been disposed of in landfills or wastewater treatment plants. Microbes then digest the oils and release methane and CO2. In diverting this fuel source from the landfill and making use of used cooking oil to produce electricity, the same amount of CO2 is created. However, we're able to harvest a significant amount of useful energy. A Vegawatt™ creates energy from material that was being thrown away!

"My largest line-item expense is runaway utility costs. The Vegawatt™ system enables me to significantly reduce my energy costs, generate clean energy on-site, and very importantly, reduce the heavy energy footprint of my restaurant." -- George Carey, Finz Seafood & Grill

The Vegawatt™ system, by virtue of being on location, has no transmission grid, no transformers, no high voltage lines, etc. A Vegawatt™ delivers the electricity directly to the restaurant with no additional transmission infrastructure. In fact, the Vegawatt™ frees up transmission capability that was being utilized by the restaurant.

Looking To The Future

It is plausible that in a growing city, the installation of enough Vegawatts can reduce the need for additional electricity transmission lines into the city and that the installed vegawatts will be able to produce enough electricity in the heart of the city to keep pace with the need for more electrical transmission.

How Emissions Compare:

What 1 KW Of Electricity Costs In CO2 Production:

- A Coal-fired electricity generator will burn roughly 1/2 a kilogram of coal to produce 1 kw of electricity, and release 1016 grams of CO2 in the process.
- A Fuel-oil (petroleum diesel) fired electricity generator will produce 1 kw of electricity and release 988 grams of CO2.
- A Natural-Gas-fired electricity generator, recognized as the cleanest fossil fuel energy producing method available, will produce 1 kw of electricity and release 670 grams of CO2 in the process.
- A Vegawatt™, running waste vegetable oil as fuel in a co-generator, will produce 1 kw of electricity and release 642 grams of CO2 in the process.

The Vegawatt brochure is attached, if you buy one for your restaurant or home (who knows) let them know Peace Portal.mobi sent you!

Attachments:

File	Description	File size
Vegawatt Brochure	Turn vegetable oil into clean energy, a product brochure for restaurants	360 Kb

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