

# Cheesemakers Are Using Production Waste to Make Electricity

Source: [good.is](http://good.is)

Published: April 21, 2016



The French are stylishly tackling food waste with a picturesque new power plant, high in the Alps, that converts cheese waste to electricity. Located in the quaint Alpine town of Albertville, the plant will use Beaufort cheese whey—a liquid produced during the cheesemaking process that often winds up in the garbage—to fuel biogas reactors. The resulting gas will be enough to power a community of around 1,500 people, reports the Telegraph.

And this isn't an obscure technology. The American Biogas Council estimates that up to one million digesters (that's what biogas processing containers are called) scattered around the world are currently producing sustainable, green energy. Biogas production has been proposed for everything from a sustainable way to power homes in the developing world to a solution for disposing of the 12 tons of poop produced by basecamps on Mount Everest each year. In that case it could also provide free power for communities living downwind of the mountain.

The waste-loving bacteria that live inside biogas digesters do not discriminate when it comes to organic matter. They'll happily eat feces or fancy French cheese — it's all the same to them. The beauty of their lifecycle, however, is that in addition to getting rid of unwanted material they produce methane, which is the star component of natural gas and a byproduct of the bacteria's feasting. Once methane mixes with carbon dioxide it's called biogas, and it can be used for cooking, heating, lighting and more. Or it can be transformed into electricity. Meanwhile, the bacteria's solid leftovers make for happy farmers since they can be used as high quality fertilizer. In the French case, the whey-turned-biogas will generate electricity—about 2.8 million kilowatt-hours per year, according to the Telegraph. And we're almost suprised that number isn't higher, considering France produces as many as 500 varieties of cheese, meaning that cheese energy is potentially to France what thermal energy is to Iceland. But this isn't the first time someone has had the bright idea to turn whey into electricity, it will be one of the largest of such undertakings and spearheaded by a company called Valbio. Around 20 smaller cheese-based power stations already exist throughout Europe and Canada, the Telegraph writes, while others are planned for Australia, Brazil and Uruguay.

And this isn't just the most French idea ever. Here in the U.S., some forward-looking states like Pennsylvania and Vermont, are providing subsidies for farmers to install biogas digesters. Most use them to clean up after their cows and get rid of agricultural waste. The Crave Brothers Farmstead Cheese farm, located in Waterloo, Wisconsin, is one of a handful of dairy farms in the U.S. that uses its digester to upcycle whey. Owner Charley Crave transforms the 10,000 tons of leftover whey his farm produces each year to heat his barn, and sells the remaining electricity to the local power company. As he told Ecomagination, "There's probably a \$20,000 a year difference between purchasing that heat and utilizing what's available."

---