

New Report Addresses Both Imperatives of the Food Waste Epidemic: The Need to Reduce It, and the Need to Put Waste That Can't Be Eliminated to Productive Use

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The U.S. and global food waste problem is becoming more widely recognized, with mainstream organizations and media outlets reporting a staggering 30% of global food production worldwide goes to waste (up to 40% in the U.S.). Much of the attention has gone to the need to reduce food waste. But a report released today by the NGO Energy Vision, "Food Waste Erased," broadens that focus to include a less discussed but no less important dimension of the food waste problem: what to do with food wastes that can't be eliminated.

"[Food waste] is an increasingly intolerable drag on food security, sustainable resource use, the economy...and the fight against climate change," writes Energy Vision Chair Joanna Underwood. As the report points out, consumers in North America and Europe waste almost as much food as sub-Saharan Africa produces (230 million tons). If it were a country, food loss and waste would be the third-largest greenhouse gas emitter, behind China and the U.S.

"Food Waste Erased" gives an overview of various public- and private-sector initiatives for reducing food waste at various levels, from individual best practices to international policy. The US Environmental Protection Agency, the US Department of Agriculture, the United Nations Sustainable Development Goals and most recently, the global retailer IKEA have all adopted goals of cutting food waste in half.

That's a critically important ambition, but even if it were achieved, it would still leave the other half of food waste to manage, Underwood argues. "No matter how much food waste we avoid, we need to recognize that some element of waste will always be endemic, especially the large stream of inedible food," she says. "The question is, since we may not be able to avoid those wastes, what do we do with them?"

The report describes various productive uses for food waste, ranging from making it into compost to capturing the biogases it emits as it decomposes and refining them into renewable natural gas (RNG) for power generation and transportation. As a vehicle fuel, RNG produces the greatest greenhouse gas reduction benefits. This fuel can even be net carbon-negative, meaning it can actually prevent more GHGs from getting into the atmosphere than burning it in vehicles emits. Compared to diesel and gasoline, RNG produced by anaerobic digestion of food waste can reduce GHG emissions up to 120%.

“That’s remarkable,” said Underwood. “RNG as a transportation fuel is a net gain for the climate and it’s economical, so it’s not surprising that it’s growing fast.” RNG operations are springing up across the country. For example, construction recently started on the first anaerobic digester facility in Utah, which will process food waste into enough RNG to power a city of 40,000. Thanks in part to federal incentives like the US EPA’s Renewable Fuel Standard, RNG has grown rapidly in the U.S., from the equivalent of 20 million gallons of petroleum fuel in 2013 to almost 150 million gallons in 2016, and is on pace to displace 250 million gallons in 2018. Matthew Tipper, Vice President of Future Fuels for Shell, recently wrote in Politico that until 2030 sustainable biofuels including RNG, combined with more efficient engines, “will provide the most cost-effective means of decarbonizing the transport sector.”

“There’s a wide range of strategies available today that enable all food produced to be utilized as a resource, either as food or as sustainable energy or fuel,” said Underwood. “They involve both eliminating edible food waste on the demand side, and recognizing the value of inedible food we can’t eliminate by using it optimally on the ‘supply’ side.” “Food Waste Erased” provides current information on solutions from both sides.