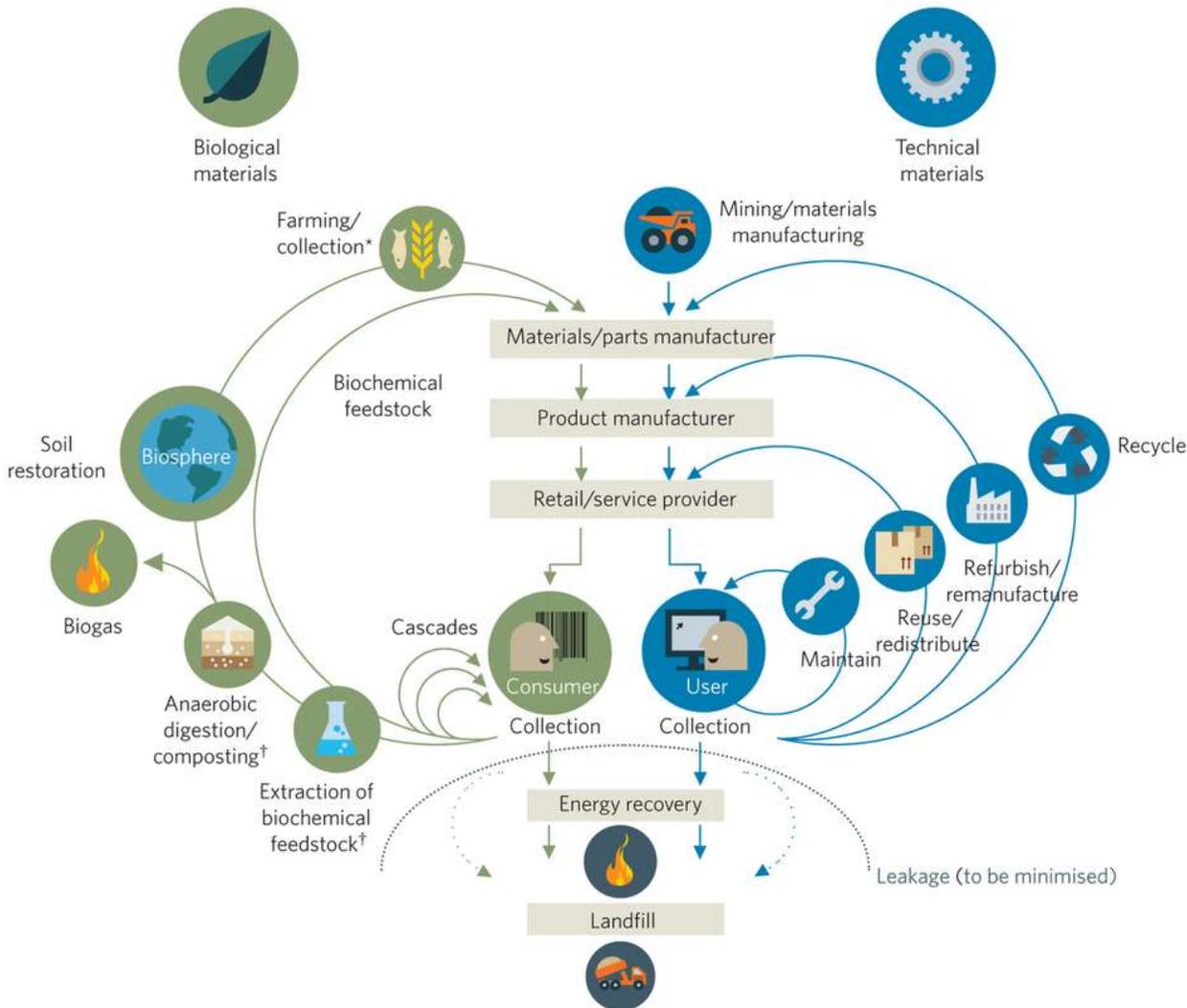


Turning Trash to Treasure (#1): The New Circular Economy of Waste

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Source: Ellen MacArthur Foundation

Let's face it; waste isn't what it used to be: a problem with no solution. Aided by the rise of new "smart" waste management technologies, trash is beginning to be understood as a **renewable resource for material and energy recovery**. As waste is transformed into commodities that boast both environmental and economic benefits, a circular economy is forming around the things we throw away.

Here's what it looks like:

- Waste to fertilizer, compost, and mulch
- Waste to animal feed
- Waste to energy and fuel

This waste revolution is being driven in large part by environmental and political pressures that are pushing for diversion of waste from landfills. One of the biggest culprits of greenhouse gas emissions is food waste. Each year, more than 30 million tons of food goes to the

landfill, producing roughly 18% of gas emissions in the United States. Methane (CH₄)—one of the gases produced by decaying food—is between 50 and 80 times more toxic than Carbon Dioxide (CO₂)!

Recognizing this issue, legislators have been putting pressure on businesses to recycle the organic waste they produce. Last month, the EPA and US Department of Agriculture laid out a bold goal to cut the country's food waste 50% by 2030. And in California, new legislation will mandate businesses—starting with those that produce 8 or more cubic yards of waste each day—to separate their food scraps and yard trimmings and arrange for organics recycling by April of 2016. By 2020, AB1826 will require 50% of organic waste to be diverted from landfills. The first line of businesses who will be affected by this legislation are restaurants, supermarkets, large venues and food processors, all of whom are cringing at the added costs this mandate will entail. Landfill dumping costs (aka “tipping fees”) average at \$54/ton but can run as high as \$100+/ton and these costs are transferred by waste haulers onto businesses.

New partnerships and waste management technologies are looking to address this problem by creating value from the materials businesses currently pay to get rid of. One of the first ways they are doing this is by developing better ways to produce and profit from the creation of compost and mulch. According to a 2008 study by CalRecycle, California disposes approximately 30 million tons of waste in landfills each year, of which more than 30 percent could be used for compost or mulch!

When Albertsons was searching for ways to minimize its environmental footprint, the company teamed up with green waste recycler, Agromin to produce Albertsons-branded “Potting Mix” from the food waste generated by its stores. Not only did this partnership position Albertsons as an environmental leader, it also created a way for the company to minimize its waste removal costs while generating an additional source of revenue.

While partnerships like these are creating greater demand for composting services, several challenges face large-scale composting operations. First, composting sites are under strict state regulations to control the greenhouse

gas emissions and odors produced by decomposing food waste and many sites are not equipped to deal with these issues. Second, producing compost is a time-consuming and labor intensive process that typically takes 3 months or more.

Composting Made Better:

New technologies like the Regreen Organic Waste Recycling Processor help these businesses create high-quality finished products faster. **What was once done in months can now be done in hours!** By removing the need for composting on open land, the machine eliminates the issue of greenhouse gas emissions from exposed waste piles and even provides companies like Albertsons with the opportunity to cut costs further by creating compost on-site. By killing the harmful bacteria that produce odors, the Organic Waste Recycling Processor also creates odorless compost products.

Conclusion:

Compost offers a particularly rich example of waste as a circular commodity. It demonstrates how the waste from one business can be made profitable and turned into the feedstock of another. It is a product that can easily benefit corporations, waste processors, farmers, and the environment in a virtuous circle with the help of technologies like the Regreen Organic Waste Recycling Processor. These technologies **enable onsite organic waste diversion** that eliminate hauling costs, allow for companies to comply with state regulations, and produce a marketable product that can price for up to \$8 per 30 pound bag. They do this all while creating a greater supply of high-quality compost for farmers, enriching depleted topsoil, and cutting down on greenhouse gas emissions from landfills.

Now, that's “smart” waste management!

Compost is only one piece of the new waste economy. Next time, we'll look at how organic waste is being transformed into animal feed.

References:

www.endfoodwastenow.org/index.php/resources/facts
www.calrecycle.ca.gov

The Regreen Machine

Commercial Organic Waste Recycler

Applications up to 2 tons per hour



From This



*To This
In Minutes*



The **Regreen** way to eliminate waste!

- Commercial kitchens
- Grocery Stores
- Naval ships
- Vegetable Markets
- Cruise lines
- Distribution Centers
- Food Courts in Malls
- Hospitals

Processes Food Waste and all Organics

Continuously produces odor and bacteria free material at rate of 1-2 Tons Per-Hour.

De-waters and dries material, eliminating 65% of weight and 85% of volume.

Easily Refine to Pellets or Powder, Fertilizer, Feed or Fuel.



[Regreen manufactures various machines to convert waste (food, organic, medical, and dirty municipal waste) into dry odorless and germ-free products. This can be further pelletized for fuel, or used for animal feed, compost or fertilizer. These patented and patent-pending machines are available for purchase or lease. The manufacturer is willing to place machines and share the tipping fees and revenue from pellets etc. Please contact Robin@Regreenus.com for details]