



Preserving Resources,  
Preventing Waste

# The New Jersey WasteWise Bulletin

Newsletter of the New Jersey WasteWise Business Network – Autumn, 2015  
WasteWise...improving your bottom line and the environment  
through waste reduction, recycling and recycled product procurement.

## Use WARM and iWARM to Show Environmental and Energy Impacts

The United States Environmental Protection Agency has made available two very useful tools that can help companies, organizations and individuals calculate how their waste reduction and recycling efforts translate into environmental benefits, such as reductions in greenhouse gas emissions and energy savings. The Waste Reduction Model (WARM) was designed for solid waste planners, businesses and other organizations and focuses on greenhouse gas reductions resulting from recycling and other waste management strategies, while the Individual Waste Reduction Model (iWARM) enables individuals to calculate how much energy they can save by recycling.

The WARM model calculates and totals greenhouse gas emissions of baseline and alternative waste management practices—source reduction, recycling, combustion, composting, and landfilling. The model calculates emissions in metric tons of carbon equivalent (MTCE), metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E), and energy units (million BTU) across a wide range of material types commonly found in municipal solid waste. WARM is periodically updated and now recognizes 54 material types. This model is recommended for those businesses and organizations interested in the climate and waste connection. Check it out at <http://www.epa.gov/wastes/consERVE/tools/warm/index.html>.

The iWARM model was developed to provide individuals with specific information about the energy saved by the recycling of everyday recyclable materials, such as bottles, cans, paper, etc. The amount of energy saved is shown as the amount of

time you can power an appliance. The iWARM tool is based on the WARM model and highlights an environmental benefit of recycling that is often overlooked, that being energy savings. Check it out online at <http://www.epa.gov/wastes/consERVE/tools/iwarm/index.htm>.

### ***iWARM in Action! - A Look into the Editor's Recycling Buckets***

*As a resident of Mercer County, my recyclables are collected through the countywide single stream collection program. Upon sorting and categorizing the recyclables in my recycling buckets, I found that I had the following mix and quantity of materials: (for 2 week period)*

*Aluminum cans – 22  
Catalogs - 10  
Corrugated cardboard - 1  
Envelopes (white business) - 31  
Glass bottles - 18  
HDPE plastic milk jugs - .5  
Magazines - 2  
Mixed paper grades – 20 sheets  
Newspapers and inserts (daily) - 12  
Newspapers and inserts (Sunday) – 2  
Paperboard cereal and packaging boxes - 80  
PET plastic bottles (20 oz. or less) - 41  
Steel (soup) cans - 11*

*After plugging the above recycling amounts into the iWARM program, I found that my family's recycling efforts resulted in a Net Energy Savings of 1,810.94 (Thousand Btus), which equates to a Delivered Electricity Equivalent of 176.9 kWh. Furthermore, the iWARM program calculated that this amount of energy saved is equal to the electricity required to run **one** of the following appliances: a ceiling fan for 1,474 hours, a hair dryer for 115 hours, a dishwasher for 73 hours or a laptop computer for 3,538 hours!*

*I recommend trying the iWARM program. It will not only highlight the energy savings from your personal recycling efforts, but may bring to light some materials that you may be overlooking or could do a better job of recycling. - SR*

# Food Waste Recyclers Coming to New Jersey and Long Island

As most people in the recycling community know, there is a lack of food waste recycling facilities in the region. Thankfully, this is about to change in the not-too-distant future as Organic Diversion's new food waste recycling plant in southern New Jersey and American Organic Energy's food waste recycling facility on Long Island are both expected to be up and running sometime in mid-2016.

The Organic Diversion food waste recycling facility will be located in Gloucester City, NJ and will be able to recycle about 60,000 tons per year of food waste and other organic waste. The operation will process this organic waste into renewable energy and compost. The facility will generate approximately two megawatts of renewable energy and 60,000 cubic yards of high-quality compost.

The American Organic Energy food waste recycling facility will be located in Yaphank, NY (Suffolk County). The operation's anaerobic digester will be able to recycle approximately 120,000 tons of food waste, 30,000 tons of fats, oils and greases, and 10,000 tons of grass clippings annually. The digester will convert these materials into clean energy, nutrient-rich water and solid-based fertilizer.

# National Parks Striving for Zero Waste

Yosemite, Grand Teton and Denali National Parks are looking to make great strides in their waste management practices and have set a zero waste goal for their park operations. The three parks are currently diverting 42% of their 16.6 million pounds of annual trash through recycling and composting, but want to do more and ultimately eliminate waste from the parks. Park management plans on studying the zero waste strategies utilized by the Subaru company, which has been a leader in this area over the years.

# Did You Know...

- In less than one year's time, 100 of New Jersey's school boards have registered their districts with the Sustainable Jersey for Schools Certification Program. For more about this program, visit <http://www.sustainablejerseyschools.com/#>.
- Wrecords By Monkey is a Brooklyn, NY company that recycles old 33 vinyl LP records into a variety of jewelry and home design products. Check it out at [www.wrecordsbymonkey.com](http://www.wrecordsbymonkey.com).
- The USEPA is hosting a free webinar on October 15, 2015 entitled "Does Plastics Recycling Need to be So Confusing?" For details and to register, visit <http://www.epa.gov/wastes/conserve/smm/web-academy/2015/oct15.htm>.
- Renovation Angel (a donation program of the non-profit organization Recovery Unlimited) recycles luxury pre-owned kitchen and renovation items and resells these items at a discounted price. Proceeds earned from the sale of the recycled luxury kitchens are used to support non-profit outreach programs, such as those in the areas of at-risk youth and addiction recovery. This program also saves tons of material from being disposed in landfills. Visit <http://renovationangel.org/> for more.
- The State of New Jersey's Department of the Treasury maintains a "green" purchasing website that includes a list of state contracts with "green" products and services. Visit online at <http://www.state.nj.us/treasury/purchase/green-purchasing.shtml> for more information.
- Nearly 400,000 pounds of man-made trash has been left on the moon by American astronauts. This lunar trash consists of anything from jettisoned space craft to golf balls to bags of human waste.
- Polartec LLC has now recycled over one billion plastic bottles to create fabrics that are used by various clothing manufacturers!

### ***New Jersey WasteWise Business Network***

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<http://www.nj.gov/dep/dshw/recycling/wastewise/brbn03.htm>  
[www.epa.gov/wastewise](http://www.epa.gov/wastewise)

*Editor: Steven Rinaldi - Printed on Recycled Paper*