

The New Jersey WasteWise Bulletin

Newsletter of the New Jersey WasteWise Business Network – Winter 2024 WasteWise ... improving your bottom line and the environment through waste reduction, recycling, and recycled product procurement.

Spotlight on Solar Panel Recycling

Solar energy has made huge strides in New Jersey during the past two decades. Despite its small size, New Jersey is eighth in the nation for cumulative installed solar photovoltaic capacity, with over 4.4 gigawatts installed in more than 174,000 individual projects. While solar panels are durable and long-lasting, many are reaching the end of their useful lives and will need to be managed as recyclable materials or waste. Damaged or defective solar panels must also be handled accordingly. It is estimated that between 2025 and 2040, end-of-life solar panels or photovoltaic module accumulation will grow thirtyfold.

To address this increasing challenge, the New Jersey Solar Panel Recycling Commission was launched in 2021 and tasked with developing a report that explores recycling and other management options for solar panels no longer in service. The Commission's report was released in November 2023 and is available at https://www.nj.gov/dep/dshw/recycling/Solar%20Panel%20Commission.pdf. The report's key recommendations are based on two primary goals:

Goal 1 - Recycling (processing) end-of-life solar panels and sending components to legitimate and verifiable end markets.

Recommendation - Construction of new solar panel recycling centers.

Recommendation - Management of photovoltaic modules as universal waste at existing facilities, includes Advanced Recovery Fee per module at the time of purchase by consumers, or Extended Producer Responsibility model.

Goal 2 - Extended use and reuse of solar panels.

Recommendation - Continued use of solar panels beyond nominal or arbitrarily determined life span.

Recommendation - Reuse of solar panels by shipping the panels to domestic and international areas with fewer financial resources and lower accessibility to new solar panels.

With the Solar Act of 2021 calling for an even more robust solar energy sector in New Jersey, the management of end-of-life solar panels will only become a more pressing issue.

Recycle Coach Case Studies Lead the Way

The N.J. Department of Environmental Protection (DEP) recently released a Recycle Coach Case Studies resource, highlighting New Jersey municipalities that successfully utilize the Recycle Coach system. Recycle Coach is an information and education system designed to encourage recycling, reduce confusion about what can be recycled and ultimately reduce recycling contamination. The Recycle Coach app can be customized to provide specific recycling information to residents based on their address. By having the Recycle Coach app on their cell phone or available through a municipal website, residents can easily look up their local recycling information.

It is hoped that this resource will encourage nonparticipating municipalities to sign up for Recycle Coach, which the DEP has made available to municipalities and counties at no cost since 2018. Check out the Recycle Coach case studies resource at https://www.nj.gov/dep/dshw/recycling/RecycleCoachOctober23.pdf.

Did You Know...

- Spectators at the upcoming Paris 2024
 Olympic Games will sit on chairs made
 of post-consumer recycled plastic that
 was collected from local programs.
- Most used antifreeze is recycled into new coolant by filtering out metals or oil and adding new chemicals. So, you may be buying recycled antifreeze without even knowing it.
- The DEP's fact sheet on dual stream collection of recyclables is available at https://www.nj.gov/dep/dshw/recycling/Dual%20Stream%20Fact%20Sheet.pdf.
- SecondVerse is a student-run notebook reuse program, based in East Brunswick. Partially used notebooks and binders are collected through a network of donation boxes and then sorted by size. Unused paper is removed from the notebooks, trimmed and put into new notebooks with new covers. The newly created notebooks are then given to those in need. For information about this innovative reuse program, visit https://greengoodguardians.org/.
- According to the USEPA, 58% of fugitive greenhouse gas emissions from landfills comes from organic waste.
- The Burlington County regional recycling program has been operated by the Occupational Training Center of Burlington County, Inc. (OTC) since 1982. The OTC is a private, nonprofit agency that trains and employs individuals with disabilities.
- Gently used crutches, canes, wheelchairs, commodes and other similar medical equipment can be donated to Goodwill Home Medical Equipment in Bellmawr, NJ. The organization collects, sanitizes, refurbishes and sells the donated equipment and supplies at affordable prices. In addition, all of Goodwill's donation centers accept medical equipment and supply donations. For additional information, visit https://www.goodwillhomemedical.org/.
- Recycled glass can be processed into pozzolan, a material which can be used as a partial replacement for cement in concrete production. Utilizing this recycled material greatly reduces the greenhouse gas impact of concrete production.

New Law Promotes Composting at Schools

A recently passed law exempts New Jersey schools that receive and compost source separated food waste from other schools from the DEP's recycling facility approval rules, provided that certain conditions are met. More specifically, schools that receive food waste from other schools must compost the food waste using an on-site invessel composting system or digest the food waste using an on-site anaerobic digestion system. In addition, schools may not accept more food waste than their composting equipment can handle and must notify the DEP and applicable local government entities of their intent to receive food waste from another school.

Electric Vehicle Battery Recycling Law Enacted

On January 8, 2024, New Jersey became the first state in the nation to enact Extended Producer Responsibility (EPR) legislation for electric vehicle batteries. The law covers both electric vehicle and hybrid vehicle propulsion batteries. Under the law, producers of propulsion batteries will need to create battery management plans and submit them to the DEP for approval. Producers will also be responsible for educating consumers about available collection options and must meet other criteria, such as permanently affixing an information label to the battery. The law calls for the DEP to conduct a needs assessment to determine how many relevant public and private battery recyclers are available and how many might be needed to implement the EPR law's provisions.

May 7 - Next NJ WasteWise Business Network Webinar



<u>New Jersey WasteWise</u> Business Network

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