

Recycling Markets and Tools

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2017 Manufacturers Zero Waste Networking Event





Building a Recycling Economy in NC

- NC businesses and industries need alternatives to landfill disposal
 - Saving waste costs
 - Compliance with laws
 - Meeting Zero-Waste or other sustainability goals
- Recyclers in turn provide vital feedstock to manufacturers
- Recycling becoming an important growth sector in NC economy





DEACS / RAMMS / RBAC - Who are we?

“The State Recycling Program”

- Local Government Recycling Programs
- Recycling Businesses (*Recycling Business Assistance Center*)
- Waste Generators
 - Guidance of reducing waste & finding material markets
 - On-line recycling markets directory and waste exchange
 - Waste Assessments
 - Support for Zero-Waste-To-Landfill efforts

Main goals:

- Promote waste reduction and recycling across NC
- Recover commodities to feed the economy





Recycling Market Development in NC

- Provides business development & expansion assistance for recycling companies
- Partner with economic development agencies
 - One staff person embedded with NC Commerce/Economic Development Partnership
- Integrated with other programs and **supply development efforts**
 - partnerships between industry (feedstock suppliers) and recyclers*
- As much direct engagement with recycling businesses and supply generators as possible

The screenshot shows the website for the Recycling Business Assistance Center. At the top, there is a navigation bar with the NC logo and 'Environmental Quality' text, a search bar, and links for 'NC.GOV', 'AGENCIES', 'JOBS', and 'SERVICES'. Below this is a green navigation menu with dropdowns for 'Permits & Rules', 'Outreach & Education', 'Research', 'Conservation', 'News', 'About', and 'Contact'. The breadcrumb trail reads 'Home > Conservation > Recycling > Recycling Business Assistance Center'. The main heading is 'Recycling Business Assistance Center'. Below the heading are four content cards:

- Finance**: A small image of a plant growing from coins. Text: 'RECYCLING A variety of funding opportunities are available to recycling businesses in North Carolina, including grants, tax credits and loans.'
- Recycling Markets**: A small image of a recycling facility. Text: 'RECYCLING RBAC provides tools and conducts research on recycling markets, which can be used for analyzing business opportunities in the recycling industry.'
- Business Assistance**: A small image of people around a table. Text: 'RECYCLING RBAC works one-on-one with recycling companies to assess needs and provide direct and indirect assistance through our partnering agencies.'
- News and Publications**: A small image of rolled-up documents. Text: 'RECYCLING Read RBAC newsletters and other publications.'



Marketing Your Recyclables

- Recycling encompasses multiple steps: collection, processing, and end-use
 - Your immediate “market” may be a *collection* company or *processor*
 - Each step entails profit-making by the parties involved
 - Market prices at end-use not what generator likely to receive
- Value of a material at any given stage affected by multiple factors, e.g.
 - Transportation logistics
 - Amount of secondary processing required
 - Quality and amount of the material
- Final value determined by commodity markets, mostly global in nature.





Recycling Market Pricing Update



- Markets fluctuate (*like the overall economy*)
- Until recently recyclable commodity trends have been favorable
- Series of Chinese initiatives have introduced uncertainty and are already impacting recycling markets, particularly paper and some plastics (“National Sword”)
- Price of energy affecting production & transportation
- Cost avoidance: Best case scenario is a cost neutral solution
(You will likely have to pay to have material recycled.)

China asks to ban mixed paper and many plastic scrap grades

Nation notifies WTO of year-end ban on mixed paper and several plastic scrap grades

July 18, 2017

Recycling Today Staff

China's MEP continues inspections, license suspensions

July updates name companies facing import scrap restrictions and suspensions.

July 25, 2017

Recycling Today Staff





Different Types of Industrial Waste Streams

- General Office
- Cafeteria/Break Room
- Shipping/Dunnage
- Special Wastes
- Process Wastes (by-products, trimmings, overruns, off-spec)





Plastics

- North Carolina home to many plastic recyclers, covering a wide range of resins and products in various forms
 - Very strong opportunities to find homes for plastics discards
 - Best opportunities are for single resin, clean materials
- Quantities and transport may be significant factors in local recycling options
- Plastic recycling markets strongly track petroleum and natural gas pricing





Examples of Materials with Localized Markets

- Organics

- Compostable materials have negative market prices and do not travel far
- Localized infrastructure relies on tipping fees, hence “market pricing” is negative
- Wood waste as fuel or mulch also localized and is an historically flat market
- NC in pretty good shape with these markets (*except engineered wood*)

- Pallets

- Recyclable pallets have had same basic pricing for years
- Mix of pallets is what is key – standard vs customized
- NC has very strong pallet recycling infrastructure





Fuel/Energy Markets

- Waste to Energy plants
 - All are out of state, some close to NC
 - Negative pricing
- Cement kilns
 - Plants in SC accessible to NC generators
 - Accessed through fuel blenders of both solid and liquid materials
 - Btu value, contaminants are key factors
 - Negative pricing, generally above landfill tipping fees





Emergence of Zero Waste Service Providers

Access to markets provided by growing number of singular service providers,
e.g.:

The following companies accept "Zero Waste to Landfill Vendors " from N.C.:

Company Name	City	County	State	Phone Number
Greenpath Recovery	Colton		CA	(909) 954-0686
HWI Environmental Technologies, Inc.	Saint Louis		MO	(800) 429-9783
ICE Recycling, LLC	Lake City		SC	(828) 430-0199
Kiln Direct	Sumter		SC	(704) 301-2149

[View Printable List](#) - [Search Again](#)

- Traditional recyclers and waste haulers also active in this area – e.g., WM and Sonoco
- Pros:
 - Can be a one-stop shop for wide array of materials
 - ZW service providers can consolidate specialize materials from scattered sources
- Cons:
 - Emerging business model (generally)
 - Trading off possible market revenues for handling services



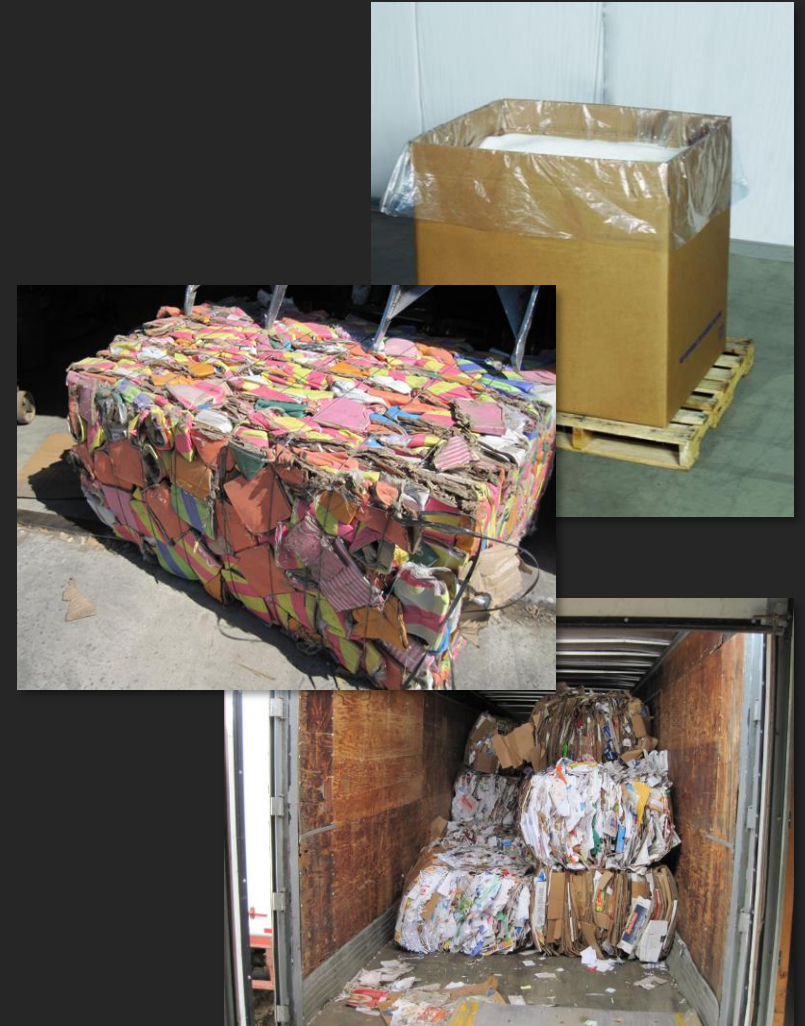
What Matters to Recyclers

- Volume – e.g., “truckload quantities”
- Material quality
- Commitment
- Ease of Access
- Service fees (where material values do not support collection costs)



Readying Material for Market

- Truckload- Many recycling vendors are willing to put empty trailers at a location to collect recyclables.
 - Vendor may specify single material
 - Ask if you can place different material types on trailer
 - Separated recyclables can be worth more, but the expense of separating by your employees and the space taken by a trailer could cost your company more than accepting less money to comingle your recyclables
- Bales – Many companies have balers on site to prepare their recyclables such as cardboard, textiles, paper, plastics, aluminum.
- Gaylord boxes- Gaylord boxes are reusable shipping boxes that can be an inexpensive alternative to baling material.





Find Your Recycling Vendor

- Gather all of your information and samples in one place
 - Item description, pictures, frequency, quantity, preparation, storage
- Talk to your current recycling & trash vendors
 - Can they take additional materials?
 - Do they have recommendations?
- When is the last time you compared pricing?



Check out the handout in your packet!



Recycling Market Tools for NC

- NC Recycling Markets Directory
 - <http://www.p2pays.org/dmrm/start.aspx>
 - Searchable online directory of recycling companies
 - Brokers, collectors, processors, end-users
 - 700+ NC companies listed
- NC WasteTrader
 - <http://www.ncwastetrader.org/home.aspx>
- DEACS and Waste Reduction Partners Staff



[RBAC Home](#)

[Search Directory](#)

[Get Listed](#)

[N.C. WasteTrader](#)

[Links](#)

Search Directory:

By material. Select the *general* type of material you want to recycle from the drop-down list below, then click "Go."

STEP 1

You have selected Plastic as the general material type. Choose the *specific* type of material you want to recycle from the drop-down list below, then click "Go."

STEP 2

By name. If you know the name of the recycling company you seek, please select the first letter of the company's name:

[1](#), [3](#), [5](#), [A](#), [B](#), [C](#), [D](#), [E](#), [F](#), [G](#), [H](#), [I](#), [J](#), [K](#), [L](#), [M](#), [N](#), [O](#), [P](#), [Q](#), [R](#), [S](#), [T](#), [U](#), [V](#), [W](#), [X](#), [Y](#), [Z](#)

Get Listed: If your company is not currently listed, you can do so [electronically](#) or by contacting RBAC staff at the number below.

You might also want to consider listing materials available/wanted on [NC WasteTrader](#), North Carolina's marketplace for discarded or surplus materials or products.

Check out our interactive [North Carolina Material Recovery Facilities map](#).

Update Listing: To update your company's information, find your company page and choose the "Update Company" link on the bottom of the listing.

Need Help? Contact the [Recycling Markets Directory Manager](#) (919) 707-8100 for assistance or to report an update.

N O R T H C A R O L I N A
WasteTradeR

[Materials Available](#)

[Materials Wanted](#)

[Need Help?](#)



Tips for Navigating Markets

- Determine your own needs, capacities, and goals, revisiting them from time to time
 - Do you want to process and market individual materials, or...
 - Do you want to let service providers/markets do the work?
- Build in regular, periodic checks with vendors/markets, addressing:
 - Market conditions
 - Pricing
 - Recyclability of materials
- Stay in touch with peers and DEACS regarding status of markets and market options
- Use NC WasteTrader for specialized materials

Thank you!

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