Recycling Markets and Tools

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2017 Manufacturers Zero Waste Networking Event
• 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
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.)
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.:

- 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
  - Searchable online directory of recycling companies
  - Brokers, collectors, processors, end-users
  - 700+ NC companies listed

- NC WasteTrader
  - [http://www.ncwastetrader.org/home.aspx](http://www.ncwastetrader.org/home.aspx)

- DEACS and Waste Reduction Partners Staff
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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