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Big Building Recycling:

Diversion Techniques to minimize your solid waste bill



Why Should Office Buildings Recycle?

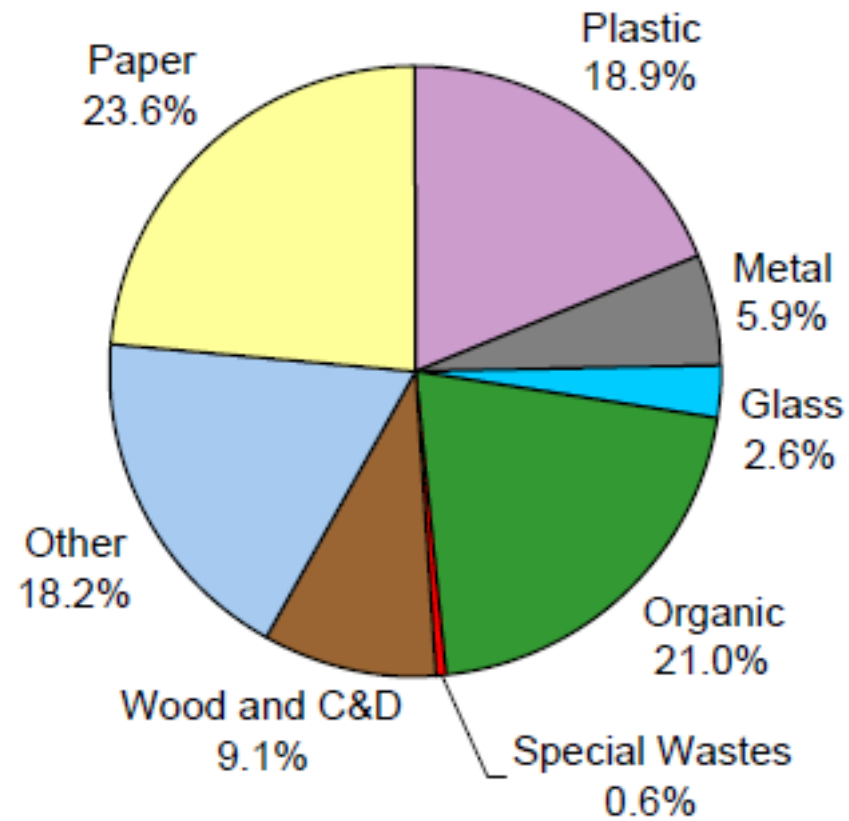
- ▶ Recycling diverts from your solid waste bill and lower trash hauling costs can **SAVE** you money.
- ▶ It's the law.
- ▶ Recycling creates valuable commodity streams, which have value and can be sold with assistance from your recycling service provider.
- ▶ Most consumers recycle at home, so continuing this behavior at work is easy and continues to support overall community recycling efforts.
- ▶ Recycling creates and supports jobs.
- ▶ It's good for the environment!

Thurston County WA (2009 WCS)

Commercial Building

Traditional Recyclable Totals:

Paper	23.6
Plastic	18.9
Metals	5.9
Glass	2.6
<u>Total:</u>	<u>51%</u>



Factors influencing your Recycling Program

- ▶ Are you a multi-tenant building?
- ▶ Are you a single tenant building?
- ▶ Do you control the Janitorial Services for your building?
- ▶ Do you control any procurement services for the building which can influence waste that gets disposed of?
- ▶ Can you invest in new infrastructure to support your updated program now or do you need to put this into a future budget?

Municipal or City Requirements

- ▶ Cities or Municipalities might have ordinances on the books governing commercial recycling.
- ▶ Check to see if there are minimum materials required to be recycled as part of a program.
- ▶ Find out what the procedure is to get your recycling program into compliance with your municipality.
- ▶ Understand the impact of NOT having a recycling program.
- ▶ See what resources are available for you from your municipal/city solid waste agency before you outsource your program.

Key Questions

- ▶ What is the Single largest component of my solid waste stream?
- ▶ What is my current infrastructure to collect materials, both in the building and at the dock?
- ▶ What does my current service provider offer in terms of recycling services?
- ▶ When can I implement a new program based on the terms of my current contract?
- ▶ Do my larger tenants have flexibility to work on waste reduction techniques?
- ▶ How aggressive do you intend to be on enforcement of the new program?

Implementing the right program

There are several different types of programs that you can implement:

- ▶ Individual Trash bins/Individual Recycling bins
- ▶ Centralized Trash collection/Individual Recycling bins
- ▶ Recycling Bin w/Side Saddle/Centralized Collection

Individual Trash bins/Individual Recycling bins

- ▶ This is the traditional approach to most collection programs.
- ▶ Bins are usually next to each other and allows for potential cross-contamination.
- ▶ Could have an impact on increased diversion goals established by the building/space management.
- ▶ Potentially allows custodial staff to mix materials when picking up and contaminating materials when they get to the loading dock.



Centralized Trash collection/Individual Recycling bins

- ▶ Under this scenario, the individual 'trash' containers are minimized.
- ▶ Strategic placement of larger trash containers throughout the floor and in key areas ensures adequate coverage throughout your space.
- ▶ Allows for the capture of recyclables at the desk, where they are produced by most individuals.
- ▶ Encourages the consolidation of waste materials and provides cleaner recyclable materials for potential sale.
- ▶ Allows custodial staff to easily separate materials at the loading zone so they are going to the correct containers.



Recycling Bin w/Side Saddle/Centralized Collection

- ▶ This is a hybrid program that keeps the 'two bin' system intact but encourages increased recycling.
- ▶ Side saddles provide a small amount of disposal, with the focus on clean recyclables produced at the desk.
- ▶ Enforces the concept of centralized waste collection and increases the availability of recycling infrastructure to maximize cost savings.
- ▶ Helps the custodial staff to keep the streams separate due to distinct differences in the types of collection bins.



Program Education: Individual Trash bins/Individual Recycling bins

- ▶ Easiest to educate on.
- ▶ Bins are typically different colors to differentiate between.
- ▶ Recyclables could be:
 - ▶ Single stream (fiber & containers combined)
 - ▶ Mixed Paper (Just fiber materials, cans/bottles collected separately; all paper grades)
 - ▶ White Paper (Only white/high grade office paper accepted; provides a significantly higher financial return versus other programs if that is a goal.)
- ▶ Similar to a home recycling program, so education is minimal.

Program Education:

Centralized Trash collection/Individual Recycling bins

- ▶ Requires some change in behavior on the part of employees.
- ▶ Strategically locating trash containers to provide coverage for employees is the key.
- ▶ Recycling could consist of:
 - ▶ Single stream (fiber & containers combined)
 - ▶ Mixed Paper (Just fiber materials, cans/bottles collected separately; all paper grades)
 - ▶ White Paper (Only white/high grade office paper accepted; provides a significantly higher financial return versus other programs if that is a goal.)
- ▶ The challenge with this this approach will be in the first few months of implementation as people get used to 'getting up' to throw out their trash.

Program Education: Recycling Bin w/Side Saddle/Centralized Collection

- ▶ Since this program is similar to the 'standard' program, the education is minimal as well.
- ▶ The learning part for individuals is that they will need to figure out the capacity of their side saddle and once they know that, their behavior adjusts appropriately.
- ▶ Recyclables could be:
 - ▶ Single stream (fiber & containers combined)
 - ▶ Mixed Paper (Just fiber materials, cans/bottles collected separately; all paper grades)
 - ▶ White Paper (Only white/high grade office paper accepted; provides a significantly higher financial return versus other programs if that is a goal.)

Working with your Custodial Staff

- ▶ Education of the custodial staff is your KEY to success.
- ▶ Once they understand the new material collection procedure they will be able to help you achieve your waste reduction/recycling goals.
- ▶ It is recommended that building management initiate a training session with ALL the custodial staff to explain the new program. This has a greater impact than coming from their supervisor.
- ▶ To ensure compliance ask your custodial services provider to have a translator on site to communicate with those employees that do not speak English as their first language.
- ▶ Follow-up training sessions annually or after an issue are recommended.

Using Contracts to Support Recycling

- ▶ Because the cleaning staff is so important to this process, tying their performance back to a successful recycling program is one more way to help support your program.
- ▶ Contracts should be structured with a system that contains:
 - ▶ A 'warning' system
 - ▶ An inspection/action step
 - ▶ Liquidated damages for repeated infractions.
- ▶ Building management needs to inspect and enforce the contract to make sure that service providers are not inhibiting program progress.
- ▶ Similarly, creating a contract with your waste/recycling services provided will also ensure that you have great service for your new program.

Leveraging Procurement

- ▶ One of the best ways to manage waste is to not produce it in the first place.
- ▶ Where it is possible, using environmentally preferable procurement practices to eliminate waste streams, will help to keep disposal costs low.
- ▶ Key areas
 - ▶ Reusable packaging where materials are coming from long term vendors.
 - ▶ Take back programs (for packaging above) and other products
 - ▶ Leasing programs versus capital expenditures
 - ▶ Internal programs such as mandatory double sided copying, 2nd side paper reuse policies and similar initiatives will reduce resource use.
- ▶ Added Bonus: Reduced cost associated with procurement means lower operating costs overall.

Program Assessment

- ▶ Evaluating your success will be data-centric but easy if you set parameters with your partners from the inception.
- ▶ Your cleaning staff should be educated to help ensure that material separated within the building stays separated and makes it to the appropriate collection container on your loading dock.
- ▶ Your Solid Waste/Recycling service provider(s) can continuously update your progress through data reporting.
- ▶ You are the key though: Daily or weekly walk-through of your dock allows a visual inspection of the materials separation.
- ▶ Similarly, you can look at your containers...if they are only ½ full multiple days in a row, you should look at downgrading your pickup frequency, if possible, or downgrade to a smaller container.
- ▶ If you find that your diverted materials are increasing, your service provider has a range of options that can provide you collection ability to suit your production.

Monitoring/Re-Educating

- ▶ As part of your assessment program you'll want to monitor your service provider and custodial contracts.
- ▶ Leverage the custodial staff to tell you where floors and/or tenants are NOT doing their job. This is proactive on their part and allows you to pinpoint specific areas of the building to have a discussion in or re-evaluate your program.
- ▶ Education is key. Constantly providing feedback to your tenants/employees will help them see the value they provide in the process.
- ▶ Re-education should happen annually and at the same time each year (Earth Day, America Recycles Day, etc.)
- ▶ All new tenants/employees should be provided a recycling guide when they move in and/or begin employment.

Create a Recognition Program

- ▶ A successful program is supported through highlighting the successes achieved.
- ▶ Providing a reminder of success through ‘touching’ employees and/or tenants will help to maintain and expand a program.
- ▶ This can be accomplished through a newsletter or periodic updates (monthly, quarterly, etc.)
- ▶ Combining your recognition and re-education programs into a similar event provides efficiency. Holding your event in conjunction with an annual event such as Earth Day and/or America Recycles Day further enhances this success.
- ▶ Rewards don’t need to be large or ostentatious, small tokens of appreciation or recognition can go a long way.

Analysis of Success

- ▶ Implementing a recycling program should provide you with a number of measurable successes that can be tracked:
 - ▶ A reduction in your solid waste collection costs
 - ▶ Lower costs in procurement due to EPP techniques.
 - ▶ New revenue streams from the sale of recyclables
- ▶ Capital costs should be amortized appropriately since the procurement of bins, etc. are long-life items.
- ▶ Programs should be approached on a long-term benefit basis rather than a short term one. Programs involving humans always have wrinkle

Questions?

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