



From Trash to Assets:

*A look at Clemson University's philosophy of
Recycling & Waste Management*

A fresh look at an old problem.



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- Started a Recycling program at a private University in 1994.
- Greater Greenville Sanitation Commission 1996-2011.
- Treasurer of the Carolinas Recycling Association 2009-2013.
- Joined Clemson University in 2006.



“If you want small changes, work on your behavior:

If you want quantum-leap changes, work on your paradigms.”

Stephen R. Covey

Why do we make it easy to throw away things?

We have been doing somethings
Wrong
for so long
that we have no idea what
Right
looks like!

Build a New Vision

Wait for a “Champion” – timing is everything!

And while you are waiting ...

Build a New Foundation

Be ready when the time is right to put all other interest to the side.

Vision

- 1. Establish a Waste Management Plan Hierarchy*
- 2. Design your new collection process to handle the eventual volume.*
- 3. Research and write a building standards that fit your University's style.*

Vision

1. Establish a Waste Management Plan Hierarchy



Conservation, Resource Management and Waste Elimination, cont'd
Solid Waste in Landfills Reduction By Maximizing Sustainable Diversion Methods
Americans spend millions of dollars each year mining, harvesting, manufacturing, shipping and selling materials designed to be thrown away. The entire consumer model is based on a model of consumption and the most aggressive economic plans call for an acceleration of consumption as means of stimulating the world economy. The entire convenience driven, disposable products marketing plan is contrary to sustainability.

At Clemson University, we understand that to build a Sustainable Campus, we need to do more than look at our energy consumption. We need to take a fresh look at everything we purchase and determine if it is the best choice for us. Sometimes the lowest price has a hidden cost that must be considered. We have learned that to build a building to be energy efficient may cost a little more during construction, but rewards are reaped for many years to come. That is true in other purchases as well from writing instruments to paper, from vehicles to fuel types and from food to computers.

The University will develop a culture of procurement that asks the important questions and seeks ways to reduce our waste from packaging reduction to life-cycle cost comparisons. What is no longer needed will be reused as a first choice, recycled where possible, researched for alternative energy as the final means of diversion and only buried when necessary.

And be able to defend it!



Education & Research
Energy & Environment
Culture & Leadership

“Solid Green: For a Better Future”
is Clemson’s anti-litter and environmental sustainability campaign. Its mission is to promote a “green” campus by coordinating and sponsoring events that further Clemson’s commitment to the environment and sustainability. The goals of Solid Green are to raise awareness of littering on campus, recycling, energy and water conservation and other environmental issues; to promote clean-up activities and other events; and to support student groups that promote environmental awareness.

Solid Green is all about taking pride in Clemson’s campus, taking responsibility for keeping it clean and taking action to help sustain the environment for a better future.

Build the Foundation

Build credibility with decision makers / groups.

Build rapport with students outside the environmental / sustainability group.

Housing
Facilities
Faculty
Dining Services
Athletics
PROJECT MANAGERS
University
Organizations

“The University will develop a culture of procurement that asks the important questions and seeks ways to reduce our waste from packaging reduction to life-cycle cost comparisons.

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Vision

2. Design your new collection process to handle the potential volume.

How does trash get removed? Learn from its efficiencies.

Get Custodial involved.

Eliminate “hub and spoke” collection systems.

Blank Slate – what would you do if you just purchased this recycling company and had to make a profit?

Establish route frequencies based on volume.

Put your plan in writing.

And start doing it!

Build the Foundation

Beg, borrow or trade for the right equipment to improve the collection efficiency.



Vision

3. Research and write a building standards that fit your University's style.

Standard bin size, shape and quantities

Collection methods and needs for access and egress

Exterior access and storage requirements

Sample drawings, photos and site plans

Standard equipment dimensions for front loaders, rear loaders and other equipment needed to collect materials.

And be able to defend it!

Build the Foundation

Earn the right to make recommendations to construction standards.

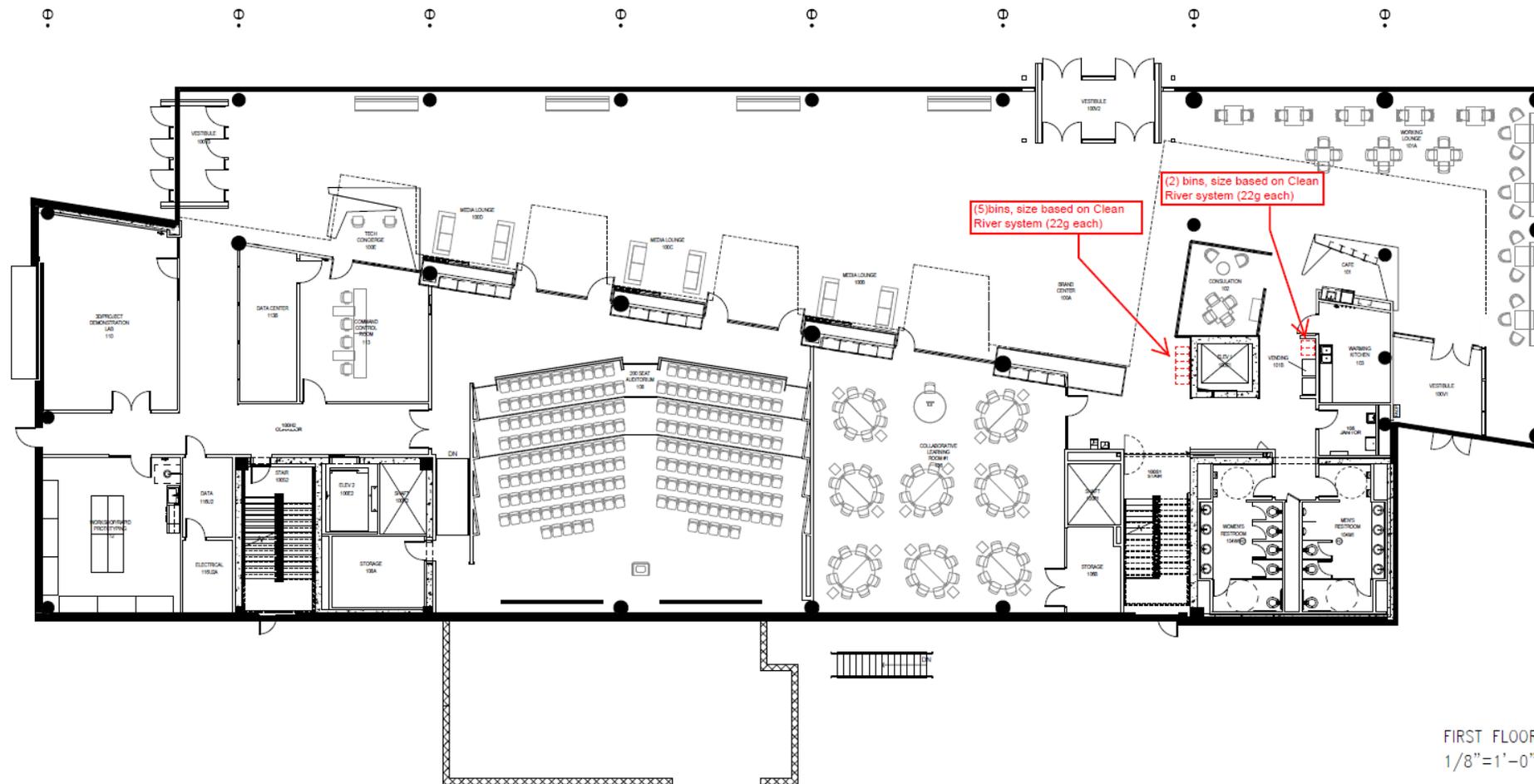
Learn how your university sets these standards and write a “suggested” update.

Get to know the people who make those decisions and ask them how you can help the University be more consistent in this area.

Most Architects forget to design for the waste stream until the last minute. You can help make them look good.

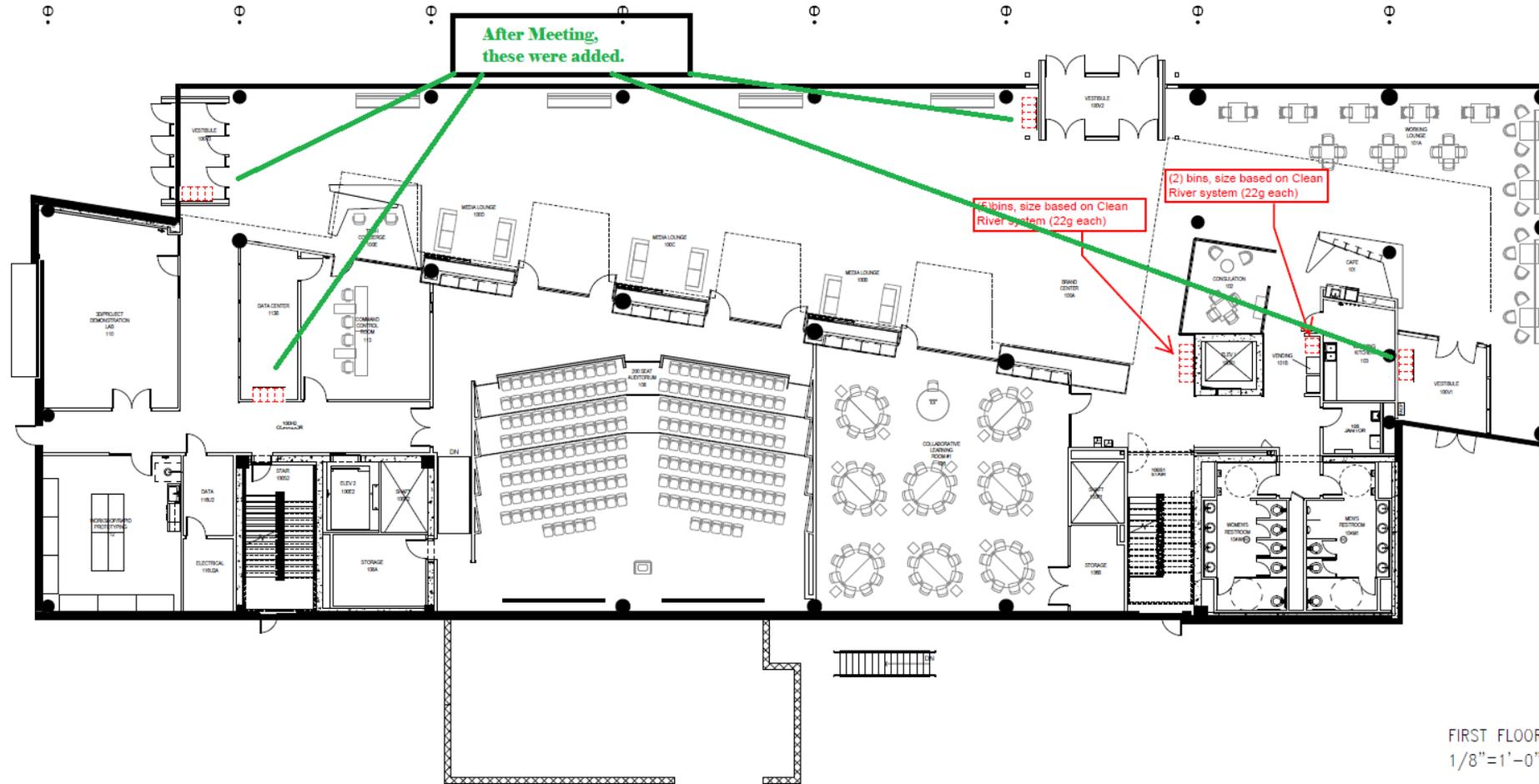
Provide them with data they need and pictures.

A philosophy of Recycling & Waste Management



FIRST FLOOR
1/8"=1'-0"

A philosophy of Recycling & Waste Management



FIRST FLOOR
1/8"=1'-0"

A “Champion”

Ours was a Business class student project. They want to do a proposal to put recycling outside near trash cans. I showed them this article and they took it and ran with it.



The Mini Bin



 CleanRiver
RECYCLING SOLUTIONS
A division of Midpoint International Inc.

Be ready when the time is right to put all other interest to the side.

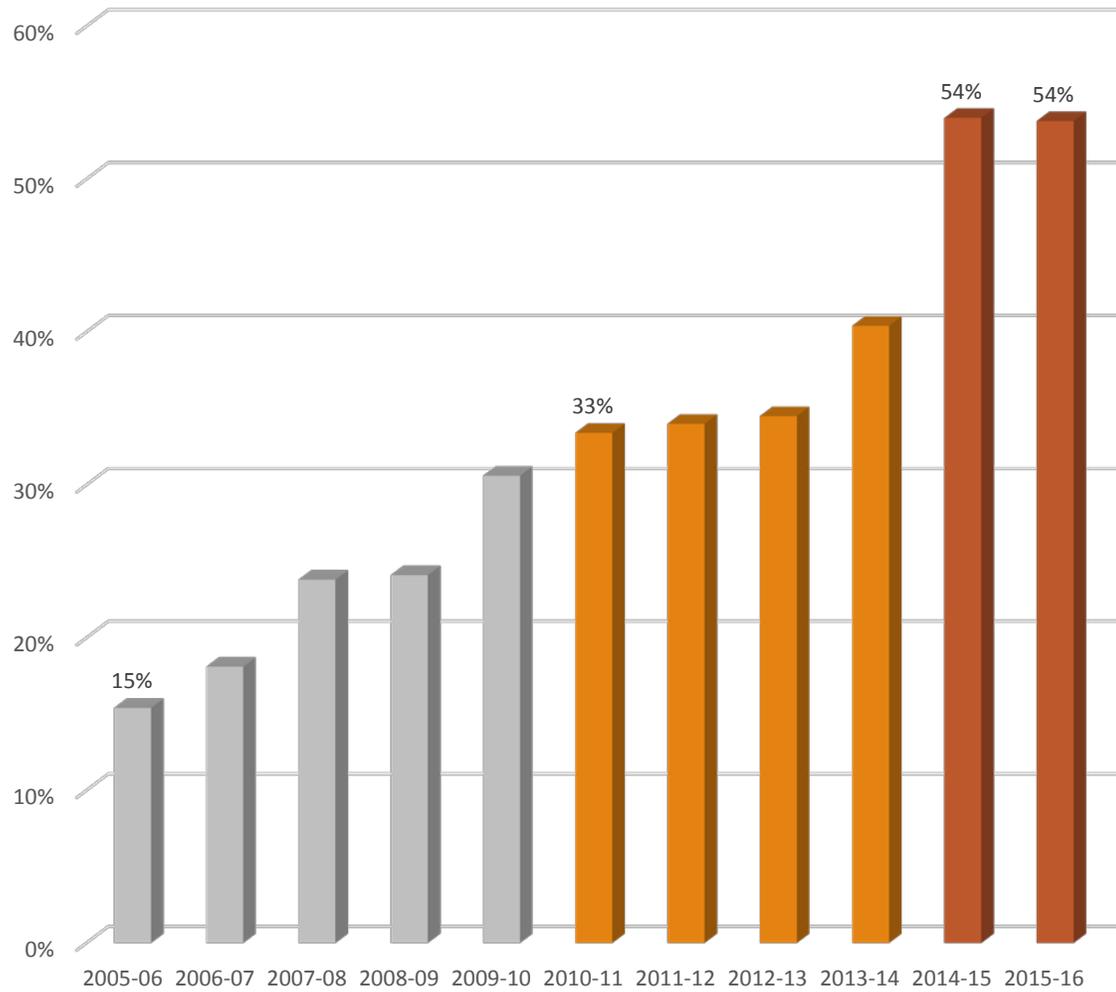
I do not recall giving you permission to put a trash can at every desk. I do not think you need my permission to take them out. You can start with mine.

President Barker

Results?

A philosophy of Recycling & Waste Management

Recycle Rate



Tons Landfilled

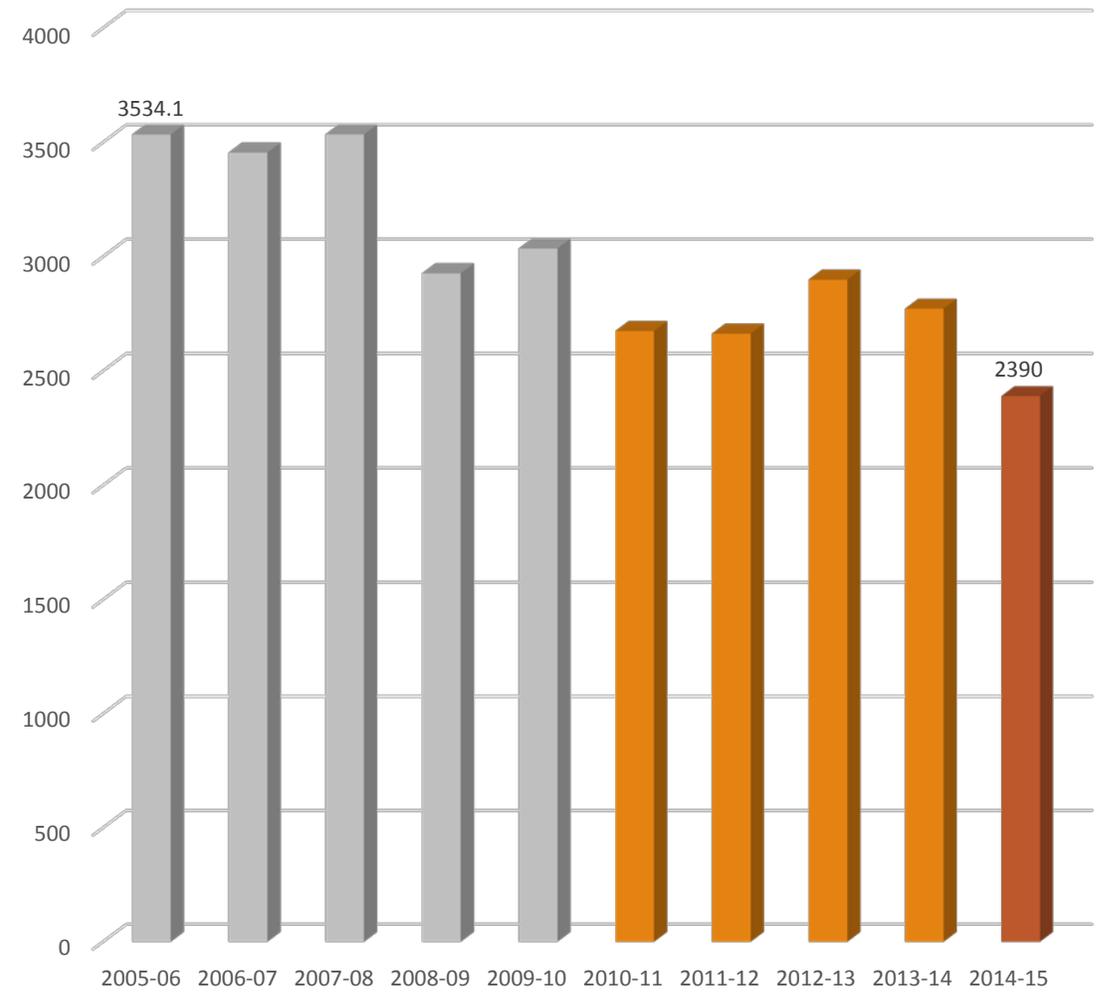
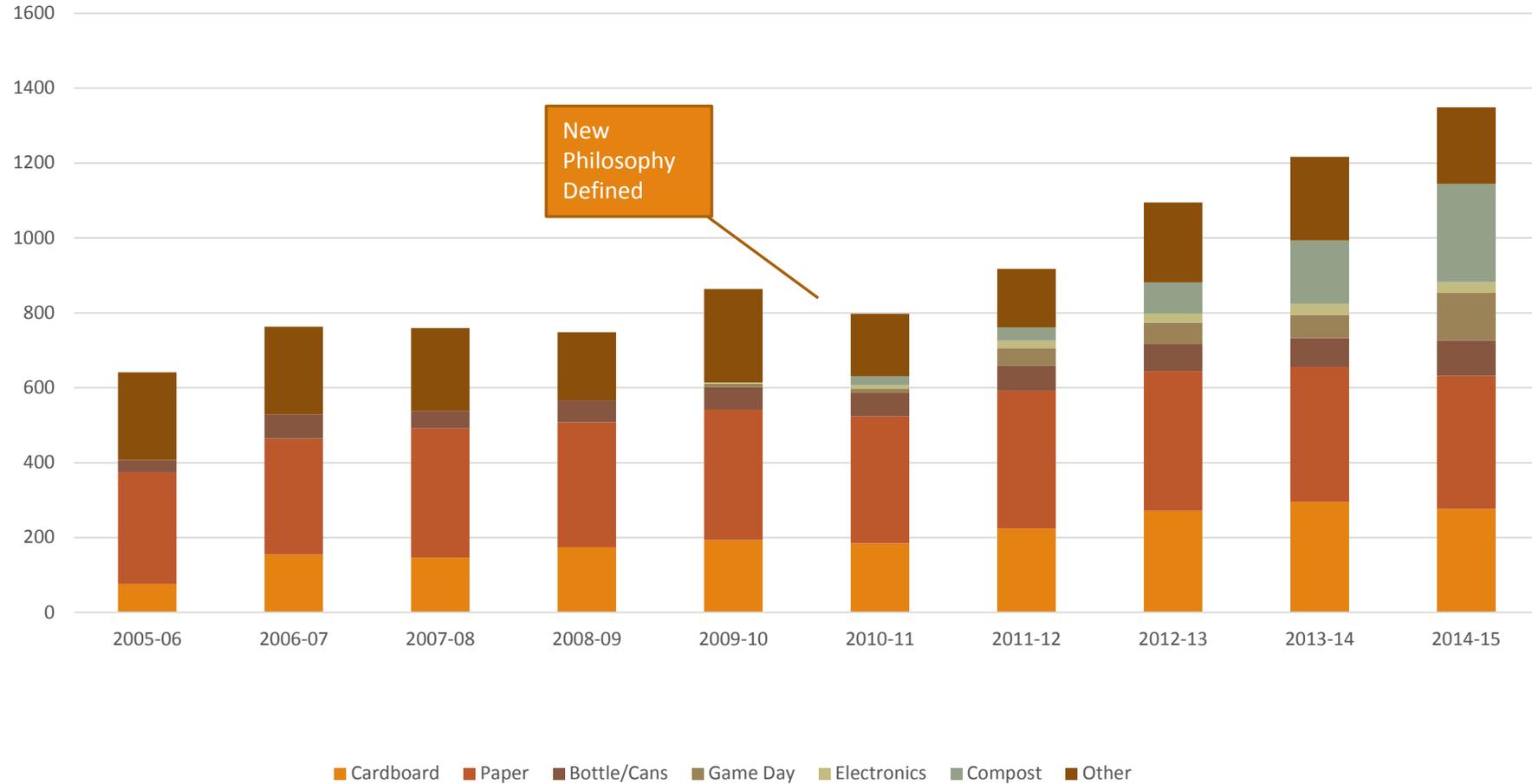


Chart Title



Remember: People Do Things For Their Reasons, Not Yours!



How Can We Get People To Recycle More?

Find their key motivation

Because it is the right thing to do ...

Give them more access.

Because it is easy ...

Find ways to make it easier.

Because it is required...

Apply more peer pressure.

Because it make business sense ...

Provide more information and statistics.



Can We Ever Expect That Everyone Will “Get On-Board”?

Stop relying on “Feel Good” motivation.

Design it into our daily process, just like someone did many years ago putting trash cans in every office regardless of need or utilization.

Build a “Back Stop.”



What Will The Waste Management Plan Look Like At Clemson University In The Future?

More Emphases On Avoiding Waste

More Education On Source Separation

More Composting

Better Game Day Sorting

Develop a “Back Stop” Solution

Find New Alternatives To Landfilling





Recycling is Sound Business



If you have any questions please contact:

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