

S O U T H C A R O L I N A

STATE AGENCIES & COLLEGES/UNIVERSITIES

RECYCLING & BUYING RECYCLED

2015 ANNUAL REPORT



Prepared for **Gov. Nikki R. Haley**
and the **General Assembly**

Compiled by S.C. Department of Health and Environmental Control's
Office of Solid Waste Reduction and Recycling



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INTRODUCTION

To establish a framework for the safe and efficient management of solid waste, the S.C. Solid Waste Policy and Management Act of 1991 (Act) – S.C. Code of Laws §§ 44-96-10 et seq. – provides a comprehensive outline for state and local governments to follow. The Act also sets statewide recycling and disposal goals.

In addition, the Act requires state agencies and state-supported colleges/universities to:

- **Establish recycling programs for the collection of selected material** including, but not limited to, aluminum, cardboard, glass, lead-acid batteries, paper, plastic, tires and used motor oil;
- **Evaluate and make necessary modifications to their programs** to ensure material is recycled to the maximum extent possible; and
- **Establish waste reduction programs for material used in the course of operations** to achieve the maximum feasible reduction.

The Act also requires state agencies and state-supported colleges/universities to submit to the S.C. Department of Health and Environmental Control (DHEC) by September 15 of each year the following information:

- **Types and tonnage of material recycled;** and
- **Lists of products purchased that contain recycled material.**

The Act requires DHEC to summarize this data and submit a report to the Governor and General Assembly by November 1 of each year. As part of the report, DHEC is required to determine what percentage of state purchases contains recycled material. Since no statewide system is in place to track the purchasing of recycled-content

products, this percentage cannot be reported. This issue is addressed in this report’s Recommendations section.

DHEC’s Office of Solid Waste Reduction and Recycling is responsible for compiling and reviewing the data submitted as well as publishing the “S.C. State Agencies & Colleges/Universities Recycling & Buying Recycled Annual Report.”

This report provides information for fiscal year (FY) 2015 reflecting activities from July 1, 2014 to June 30, 2015. It was published November 1, 2015.

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S.C. Recycling Goals

DHEC set new waste reduction and recycling goals in FY11. The state’s goals are by 2020 to:

- **Recycle 40 percent or more of its municipal solid waste;** and
- **Reduce the average disposal to 3.25 pounds per person per day.**

About this Report

The “S.C. State Agencies and Colleges/ Universities Annual Report for Fiscal Year 2015” is submitted by DHEC in compliance with the S.C. Solid Waste Policy and Management Act of 1991 (S.C. Code of Laws, 44-96-140). Additionally, Act 119 of 2005 mandates that agencies provide all reports to the General Assembly in an electronic format.

This report was published on November 1, 2015 by DHEC’s Office of Solid Waste Reduction and Recycling.

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EXECUTIVE SUMMARY

This report provides an overview of the recycling and buying recycled activities of state agencies and colleges/universities for fiscal year (FY) 2015 (July 1, 2014 to June 30, 2015) as required by the S.C. Solid Waste Policy and Management Act of 1991 (Act).

Data regarding the amount of material recycled was received either directly from the state agency or college/university that completed the survey provided by the S.C. Department of Health and Environmental Control (DHEC) or from vendors providing recycling services. Both public and private colleges/universities are included in this report although only state-supported colleges/universities are required by the Act to provide information.

In FY15, state agencies and colleges/universities recycled more than 23,624 tons of material – an increase of about 16 percent from the 19,771 tons recycled in FY14. This data was compiled from the information reported by 74 state agencies and 39 colleges/universities.

Overall, state agencies reported recycling 9,302 tons of material in FY15 – about a 5 percent decrease from the 9,790 tons recycled the previous FY. Paper was the most recycled commodity followed by construction and demolition (C&D) debris.

Colleges/universities reported recycling about 14,322 tons of material – a 30 percent increase from the 9,980 tons recycled the previous FY. C&D debris was the most recycled commodity followed by paper. An increase in C&D debris was the largest cause for the rise in the recycling rate.

As mentioned in the Introduction, the percentage of state purchases that contain recycled material cannot be determined because no statewide system to track those purchases exists. The recycled-content products purchased most frequently by state agencies and colleges/universities were office paper and inkjet/toner cartridges.



Paper recycling containers await pick up at a DHEC facility.

Year at a Glance

- 2** new programs were launched – **Green Government Initiative** and **RecycleU**.
- 7** new resources were created for colleges/universities and state agencies.
- 20** new collegiate recycling professionals were certified.
- 49** attendees participated in the Green Government Kickoff Workshop.



STATE AGENCIES

Seventy-four state agencies reported recycling and buying recycled data for fiscal year (FY) 2015 (July 1, 2014 to June 30, 2015). The list on page 5 also includes the Capitol Complex – several buildings housing multiple state agencies that recycled material together. Of these, the top five agencies for traditional recycling (e.g., paper, plastic bottles, aluminum and steel cans, cardboard, used motor oil) were:

1. **Santee Cooper** (2,365.1 tons);
2. **S.C. Department of Corrections** (1,185.17 tons);
3. **S.C. Department of Transportation** (886.08 tons);
4. **S.C. Department of Education** (260.22 tons); and
5. **S.C. Department of Health and Environmental Control** (225.3 tons).

Together these five agencies contributed about 74 percent of the traditional material recycled by all state agencies that reported.

In addition to traditional materials, some agencies also recycled large quantities of additional material such as construction and demolition (C&D) debris. The top five agencies for recycling additional material were:

1. **Santee Cooper** (1,648.71 tons);
2. **S.C. Department of Corrections** (609.65 tons);
3. **S.C. Department of Mental Health** (247.2 tons);

BANNED ITEMS	TONS
Electronics	87.12
Lead-Acid Batteries	31.85
Tires	84.92
Used Motor Oil	815.02
White Goods (large appliances)	22.90
TOTAL	1,041.80

COMMINGLED ITEMS	TONS
This category may include aluminum cans, cardboard, paper and/or plastic.	342.88
TOTAL	342.88

GLASS	TONS
Brown	1.05
Clear	1.64
Green	0.36
Other/Mixed Glass	46.57
TOTAL	49.62

4. **S.C. Department of Parks, Recreation & Tourism** (69.04 tons); and

5. **S.C. Department of Transportation** (44.2 tons).

Santee Cooper – the state’s largest power producer – generates a much larger amount of material than most other state agencies (e.g., 1,034 tons ferrous metal; 506 tons wood waste; 462 tons used motor oil). Santee Cooper also came in first place with the highest per capita recycling rate with 1.31 tons recycled per employee.

The S.C. Department of Corrections (SCDC) recyclables are collected at 24 prisons throughout the state from locations such as canteens, commissaries, cafeterias, vehicle management, construction and maintenance, a training division and the headquarters. The largest portions of material recycled by SCDC were cardboard (621.9 tons) and steel cans (199.53 tons).

The S.C. Department of Transportation (SCDOT) and the S.C. Department of Education (SCDE) both collect material at their regional locations across the state. The largest contributor to both agencies’ numbers was used motor oil collected at SCDE’s bus shops (221.4 tons) and SCDOT’s regional offices (113.7 tons).

Overall, state agencies reported recycling 9,302 tons of material – a decrease of about five percent from FY14. Compared to the past FY, more material was recycled single-stream, explaining a decrease in paper and plastic. In addition, more metal and glass were recycled than in FY14. The largest contribution to the decrease in recycling was wood (325 tons), construction and demolition (C&D) debris (248 tons) and organics (250 tons).

Twenty-four agencies reported an increase in their total recycling compared with FY14. Thirteen agencies reported this year that had not reported previously. Conversely, three state agencies that typically report did not this year.

METAL	TONS
Aluminum (cans, foil)	75.55
Ferrous Metals	1,166.49
Steel Cans	204.93
Other/Mixed Metal	463.87
TOTAL	1,910.85

ORGANICS	TONS
Food Waste (composted)	1.35
Yard Trimmings (composted)	0.04
Yard Trimmings (mulched)	3.70
TOTAL	5.09

PAPER	TONS
Books	10.93
Cardboard	796.21
Magazines	51.05
Newspaper and Inserts	9.72
Office Paper	960.33
Paperboard	42.14
Phone Books	8.80
Other/Mixed Paper	616.39
TOTAL	2,495.56

PLASTIC	TONS
HDPE	10.79
LDPE	0.03
PET	1.83
Vinyl	0.62
Other/Mixed Plastic	76.46
TOTAL	89.73

MISCELLANEOUS	TONS
Antifreeze	10.74
Carpet	0.33
Carpet Padding	0.50
Clothing/Textiles	83.16
C&D Debris*	2,055.84
Cooking Oil	1.93
Fluorescent Bulbs	5.05
Inkjet/toner Cartridges	9.58
Paint (oil or latex)	8.31
Rechargeable Batteries	5.78
Used Oil Filters	33.12
Wood**	527.94
Other***	625.08
TOTAL	3,367.36

TOTAL FOR ALL	9,302.89
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* C&D debris is not included in the state's MSW recycling rate.

** Wood includes furniture, cabinets, pallets and other mixed wood.

*** Other includes batteries, cereal pouches, corks, fly ash, golf cart plastic, gypsum, microwave, sludge, steel file cabinets and traffic cones.

State Agencies Reporting for FY15

- Administrative Law Court
- Arts Commission
- Attorney General's Office
- Budget & Control Board – Internal Operations
- Capitol Complex
- Commission for Minority Affairs
- Commission for the Blind
- Commission on Higher Education
- Commission on Indigent Defense
- Commission on Prosecution Coordination
- Comptroller General's Office
- Court Administration
- Criminal Justice Academy
- Department of Administration
- Department of Administration – Surplus Property Office
- Department of Agriculture
- Department of Archives and History
- Department of Commerce
- Department of Consumer Affairs
- Department of Corrections
- Department of Disabilities and Special Needs
- Department of Education
- Department of Employment and Workforce
- Department of Health and Human Services
- Department of Health and Environmental Control
- Department of Juvenile Justice
- Department of Labor, Licensing and Regulation
- Department of Mental Health
- Department of Motor Vehicles
- Department of Natural Resources
- Department of Parks, Recreation and Tourism
- Department of Probation Parole and Pardon Services
- Department of Public Safety
- Department of Revenue
- Department of Social Services
- Department of Transportation
- Education Lottery
- Education Oversight Committee
- Emergency Management Division
- First Steps
- Forestry Commission
- Governor's Mansion
- Governor's School for Arts and Humanities
- Governor's School for Science and Math
- Higher Education Tuition Grants Commission
- Human Affairs Commission
- Legislative Audit Council
- Legislative Printing, Information and Technology Systems
- Lieutenant Governor's Office
- Office of Regulatory Staff
- Office of the State Auditor
- Patriots Point Development Authority
- Public Employee Benefit Authority
- Public Service Commission of South Carolina
- Revenue and Fiscal Affairs Office
- Santee Cooper
- SCETV
- School for the Deaf and Blind
- Sea Grant Consortium
- Secretary Of State
- SLED
- South Trust Building
- State Accident Fund
- State Budget and Control Board
- State Ethics Commission
- State Fiscal Accountability Authority – Division of Procurement Services
- State Fiscal Accountability Authority/Insurance Reserve Fund
- State Housing Finance and Development Authority
- State Information Technology
- State Library
- State Museum Commission
- Technical College System
- Vocational Rehabilitation Department
- Wil Lou Gray Opportunity School
- Workers' Compensation Commission

COLLEGES/UNIVERSITIES

Thirty-nine colleges and universities reported recycling and buying recycled data for FY15. Of these, the top five universities for total recycling were:

1. **Clemson University** (3,565.73 tons);
2. **Coastal Carolina University** (2,189.3 tons);
3. **Bob Jones University** (1,535.88 tons);
4. **Medical University of South Carolina** (1,324.44 tons); and
5. **University of South Carolina** (1,112.33 tons).

Together these five universities contributed about 68 percent of the material reported recycled by colleges and universities in the state. Bob Jones University also came

in first place with the highest per capita recycling rate with 0.37 tons recycled per student/employee.

Overall, colleges and universities reported recycling 14,322.86 tons of material – an increase of about 30 percent from the previous fiscal year. Compared to the past fiscal year, single stream recycling more than doubled – explaining a decrease in paper, plastic and metal. In addition, glass, wood and banned items also increased. The largest contributions to the increase were construction and demolition (C&D) debris (2,977 tons) and organics (973 tons).

Eighteen colleges/universities reported an increase in their total recycling compared to FY14. Ten colleges/universities reported this year that had not previously. Conversely, one college that typically reports did not this year.

BANNED ITEMS	TONS
Electronics	214.72
Lead-Acid Batteries	20.11
Tires	26.53
Used Motor Oil	29.24
White Goods (large appliances)	24.36
TOTAL	314.94

COMMINGLED ITEMS	TONS
This category may include aluminum cans, cardboard, paper and/or plastic.	1,674.07
TOTAL	1,674.07

GLASS	TONS
Brown	0.01
Clear	2.60
Green	0.00
Other/Mixed Glass	28.30
TOTAL	30.91

METAL	TONS
Aluminum (cans, foil)	8.44
Ferrous Metals	220.04
Steel Cans	7.65
Other/Mixed Metal	607.91
TOTAL	844.05

ORGANICS	TONS
Food Waste (composted)	1,089.27
Yard Trimmings (composted)	508.17
Yard Trimmings (mulched)	1,782.23
TOTAL	3,379.67

PAPER	TONS
Books	11.76
Cardboard	1,582.42
Magazines	8.02
Newspaper and Inserts	3.23
Office Paper	559.51
Paperboard	0.11
Phone Books	1.42
Other/Mixed Paper	1,587.91
TOTAL	3,754.37



PLASTIC	TONS
HDPE	3.88
LDPE	2.10
PET	0.91
Vinyl	0.00
Other/Mixed Plastic	30.71
TOTAL	37.60

MISCELLANEOUS	TONS
Antifreeze	3.91
Carpet	2.60
Carpet Padding	0.20
Clothing/Textiles	0.13
C&D Debris*	3,864.78
Cooking Oil	115.33
Fluorescent Bulbs	30.40
Inkjet/Toner Cartridges	13.98
Mattresses and Box Springs	2.77
Paint (oil or latex)	7.94
Rechargeable Batteries	4.02
Used Oil Filters	1.89
Wood**	213.93
Other***	28.15
TOTAL	4,287.26

TOTAL FOR ALL	14,322.87
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* C&D debris is not included in the state's MSW recycling rate.

** Wood includes furniture, cabinets, pallets and other mixed wood.

*** Other includes ballasts, batteries, biofuels, lamps, medical products, mercury-containing goods, Styrofoam and water filters.



Colleges & Universities Reporting for FY15

- Aiken Technical College
- Bob Jones University
- Central Carolina Technical College
- Centura College
- Charleston Southern University
- Clafflin University
- Clemson University
- Coastal Carolina University
- College Of Charleston
- Columbia International University
- Florence Darlington Technical College
- Francis Marion University
- Furman University
- Greenville Technical College
- Horry-Georgetown Technical College
- Medical University of South Carolina
- Midlands Technical College
- Newberry College
- Northeastern Technical College
- Orangeburg-Calhoun Technical College
- Piedmont Technical College
- Presbyterian College
- South Carolina State University
- Southern Wesleyan University
- Spartanburg Community College
- Technical College of the Lowcountry
- The Citadel
- Trident Technical College
- University of South Carolina (USC)
- USC Aiken
- USC Beaufort
- USC Lancaster
- USC School of Medicine
- USC Sumter
- USC Upstate
- Williamsburg Technical College
- Winthrop University
- Wofford College
- York Technical College

RECOMMENDATIONS

South Carolina has made significant progress in its waste reduction and recycling efforts since the passage of the S.C. Solid Waste Policy and Management Act of 1991 (Act) – S.C. Code of Laws §§ 44-96-10 et seq. There is, however, more that can be done.

Clearly, South Carolina should reduce the amount of waste it generates and disposes of, recycle more material, promote the best end use of recovered material and buy more products made from recycled content. State agencies and colleges/universities are in a unique position to make a significant difference in helping South Carolina meet the recycling and disposal goals outlined in the Act.

State government and colleges/universities – as a manner of business – should lead by example and more efficiently use natural resources, reduce waste, save money and help sustain markets for material collected in recycling programs.

The Act requires the S.C. Department of Health and Environmental Control (DHEC) to make recommendations in the S.C. Solid Waste Management Annual Report on ways solid waste management can be improved. Many of the following recommendations are taken and/or modified from that report.

1. Improve state agency participation.

- Audit current state agency recycling efforts and determine areas of improvement.
- Establish recycling coordinators at each state agency.
- Provide best management practices and training to state agency recycling coordinators.
- All state agencies should, at a minimum, have recycling collection for aluminum, cardboard, glass, lead-acid batteries, paper, plastic, tires and used motor oil.
- Encourage state agencies to set up recycling at their regional offices.
- Establish a recognition program for state agencies.
- Provide state agencies with digital and printed resources including an electronic newsletter to promote recycling and buying recycled programs.

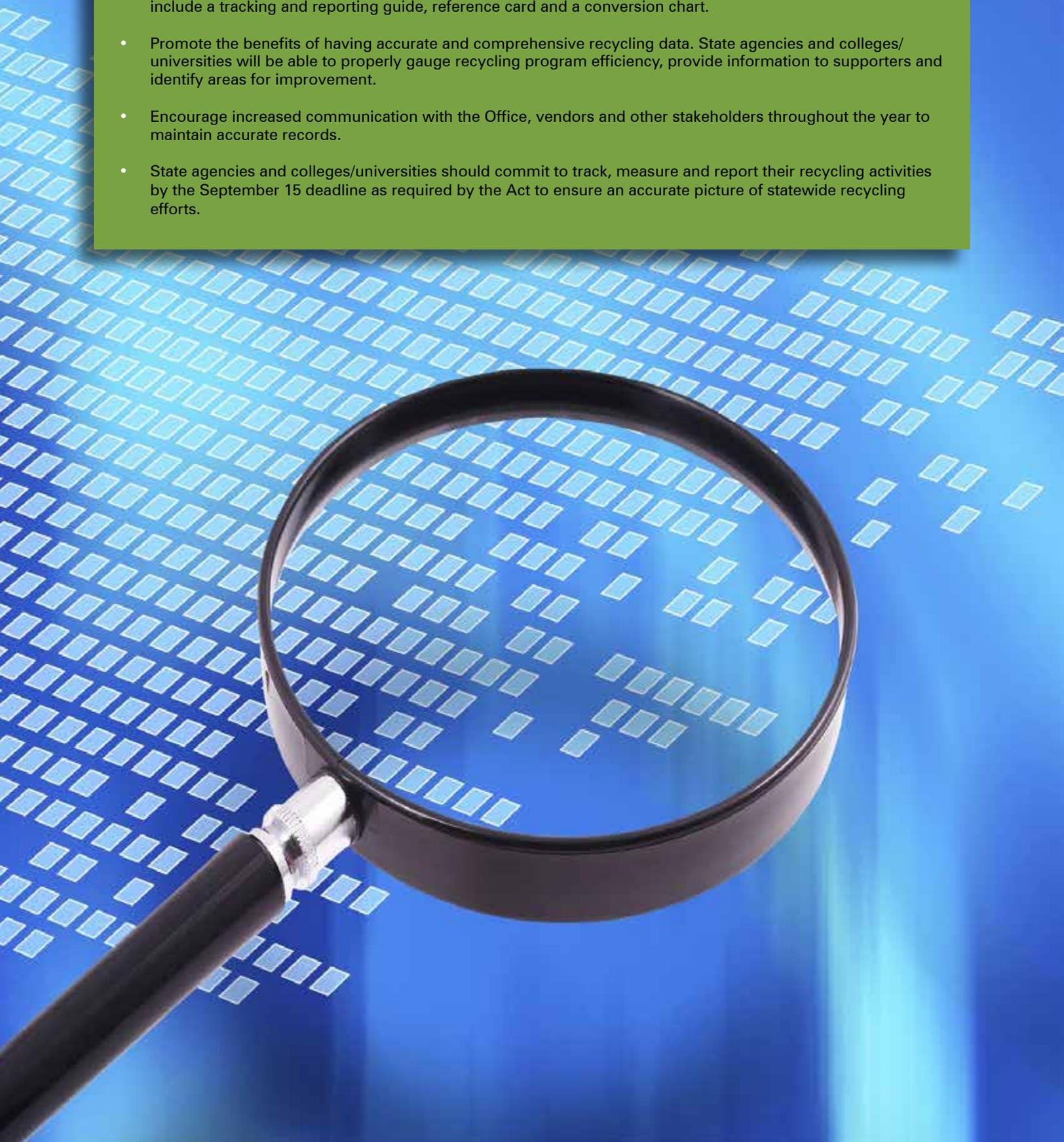
2. Promote buying-recycled practices.

- Convene a stakeholder meeting to update the Environmentally Preferred Purchasing Policy.
- Develop a statewide system to track and report recycled-content purchases.
- Promote the 7.5 percent price preference for recycled-content products as outlined in the Act to ensure that it is consistently implemented.
- Educate purchasers on recycled-content products, particularly those on state contract.
- When feasible, place additional recycled-content products on state contract.



3. Improve reporting efficiency and accuracy.

- Continue technical assistance and training to state agencies and colleges/universities on proper reporting. See “Suggestions for Better Reporting” on page 12.
- Encourage state agencies and colleges/universities to use reporting resources provided by the Office. These include a tracking and reporting guide, reference card and a conversion chart.
- Promote the benefits of having accurate and comprehensive recycling data. State agencies and colleges/universities will be able to properly gauge recycling program efficiency, provide information to supporters and identify areas for improvement.
- Encourage increased communication with the Office, vendors and other stakeholders throughout the year to maintain accurate records.
- State agencies and colleges/universities should commit to track, measure and report their recycling activities by the September 15 deadline as required by the Act to ensure an accurate picture of statewide recycling efforts.





4. Expand college/ university recycling.

- Encourage colleges/universities to have at least one person participate in the Collegiate Recycling Professionals Certification Program and maintain credit hours for re-certification.
- Continue to work with small colleges/universities and technical colleges to set up or improve campus recycling programs.
- Encourage colleges to seek non-traditional collection opportunities such as “move-in” and “move-out” reuse and recycling events.

*Students participate
in a waste audit at
Furman University.*



5. Maximize efficiency and cost effectiveness of recycling programs.

- Develop public and private partnerships that can improve programs.
- Identify improvements that can be made without additional costs to programs (e.g., adding a commodity).
- Develop and/or support programs for the recovery of food waste and other organics (e.g., yard trimmings).
- Include specific language in contracts with private haulers to expand and improve recycling programs (e.g., education and outreach expenses).
- Maximize revenue from the sale of recyclables.
- Promote the environmental and economic benefits of recycling to college/agency decision makers.



6. Enhance and strengthen education and outreach.

- Encourage colleges/universities to use RecycleU material to help provide clear and consistent messaging.
- Develop customized outreach material for colleges and universities through RecycleU.
- Develop additional best management practices for colleges and universities through RecycleU.

7. Maximize food waste reduction and recovery opportunities.

- Promote opportunities to divert prepared food to community groups and shelters.
- Colleges/universities should develop efficient, effective and environmentally sound programs to recover food waste, landscaping debris and other organic material for composting on campus.
- Develop an initiative to share information and success stories on college and university composting.

About Re-TRAC Connect ...

Re-TRAC Connect is an online software system used to report annual recycling and buying recycled data to DHEC's Office of Solid Waste Reduction and Recycling (Office). Please call the Office at **1-800-768-7348** for more information.



Suggestions for Better Reporting

The following suggestions are provided to assist state agencies, colleges and universities with keeping accurate data for annual reports.

- **Keep consistent records.** Use a spreadsheet to keep a consistent record of the amount (in pounds or tons) of materials recycled. This information may be provided by the recycling hauler or may be estimated using the Reporting Guide and Conversion Chart provided by the Office.
- **Communicate with other offices/locations.** Information included in the annual report should represent the entire agency or college/university. Clear, consistent communication will help ensure that all other offices/locations are keeping consistent records as well.
- **Communicate with your hauler/service provider.** Maintaining a good relationship with your recycling hauler/service provider will ensure that services and records are provided in a timely manner.
- **Get to know Re-TRAC Connect.** Familiarizing yourself with the survey will make reporting your data easier. Be sure to keep track of your user name (your email) and your password.



USC Students participate in the annual Give It Up for Good Yard Sale. The sale raised more than \$13,000 for Habitat for Humanity.

MORE TO KNOW

South Carolina's Green Government Initiative

In Fiscal Year (FY) 2015 (July 1, 2014 to June 30, 2015), DHEC's Office of Solid Waste Reduction and Recycling (Office) established a new program for South Carolina state agencies. The Green Government Initiative was designed to assist state agencies in meeting the requirements of the S.C. Solid Waste Policy and Management Act of 1991 (Act) and help South Carolina meet its goal of recycling 40 percent of its waste by 2020.

The goal of this program is to encourage state agencies to lead by example by:

- **Increasing waste reduction and recycling practices** to the maximum extent possible;
- **Improving green procurement practices and buying recycled-content products;**
- **Improving communication, participation and reporting;** and
- **Reducing the amount of state money spent on waste disposal.**

In order to help S.C. state government achieve this goal, the Office has created several resources including information cards on recycling, buying recycled, state requirements, reporting and green products and services on state contract as well as resources to assist in tracking recycling data.

In FY16, the Office will take steps to increase support for the program and provide additional resources and opportunities for state agencies to improve their recycling and buying recycled programs.



Green Government Initiative Workshop

In March 2015, 49 attendees participated in the kickoff for the Green Government Initiative. The event included administrative, procurement, building and grounds staff.

The program featured discussions on requirements of the Act, recycling and green purchasing resources and opportunities and other important topics. Attendees also participated in a waste audit training and roundtable discussion.

The Office plans to offer additional training and networking opportunities for state agencies in FY16.

Collegiate Recycling Professionals Certification Program

In December 2014, 20 recycling coordinators became certified recycling professionals after completing a two-day training program offered by the Office.

The program included sessions on a wide variety of topics that pertain to managing a recycling program on a college campus.

Among the topics discussed were:

- **Setting Up or Expanding a Recycling Program;**
- **Managing Organics;** and
- **Environmentally Preferred Purchasing.**

The training also featured daily roundtable discussion opportunities for the recycling professionals to be able to discuss issues and share ideas with one another.



NEW! RecycleU Collegiate Recycling Program

In FY15, the Office created a new collegiate recycling program – **RecycleU**. This program is designed to assist colleges and universities in establishing and improving campus recycling programs in order to help South Carolina meet its recycling goal of 40 percent by 2020.

In addition to resources and services already offered by the Office, the program features:

- **Peer mentoring;**
- **Statewide recognition;**
- **Workshops;**
- **Best Management Practices fact sheets;**
- **Recycling and reporting guides;** and
- **Customized publications and artwork templates.**

Information about the program and resources are available at www.scdhec.gov/recycleU.





Dave VanDeventer, Clemson University recycling coordinator, receives KAB's GameDay Recycle Challenge Award along with some of his students helpers.

Clemson No. 1 in KAB's GameDay Recycling Challenge

Keep America Beautiful's (KAB) GameDay Recycling Challenge is a competition among colleges/universities to promote waste reduction at football games. During the challenge, colleges/universities implement waste reduction programs and track and report data.

In 2014, Clemson University was recognized as the No. 1 university in the nation for total recycling with 60,724 pounds recycled at a single home football game against the University of South Carolina.

Other South Carolina rankings included:

- **Clemson University** at No. 14 in the nation with a 63.4 percent diversion rate;
- **Coastal Carolina University** at No. 9 with a 53.5 percent diversion rate;
- **The Citadel** at No. 20 with a 51.3 percent diversion rate; and
- **The University of South Carolina** at No. 32 with a 34.6 percent diversion rate.



