



DEPARTMENT OF GENERAL SERVICES

Report on the Progress of the State Agency Recycling Initiative and Metric Tonnage of the State's Recycling Program Pursuant to Executive Order 17

**TO GOVERNOR YOUNGKIN, THE CHAIRS OF THE HOUSE AGRICULTURE, CHESAPEAKE, AND
NATURAL RESOURCES COMMITTEE, AND THE SENATE AGRICULTURE, CONSERVATION, AND
NATURAL RESOURCES COMMITTEE**



**COMMONWEALTH OF VIRGINIA
RICHMOND**

DECEMBER 1, 2024

Authority: Executive Order Seventeen (2022), Recognizing the Value of Recycling and Waste Reduction, requires the Department of General Services (DGS) to (i) report to the Governor, and the Chairs of the House Agriculture, Chesapeake, and Natural Resources Committee and the Senate Agriculture, Conservation, and Natural Resources Committee on the progress of the State Agency Recycling Initiative by no later than December 1, 2022, and each succeeding year, and (ii) catalog the metric tonnage of the state's recycling program and establish goals by no later than December 31, 2022, and each succeeding year, through 2025.

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OBJECTIVE

On April 7, 2022, Governor Youngkin issued Executive Order Seventeen (EO17), Recognizing the Value of Recycling and Waste Reduction, which directs DGS to catalog the metric tonnage of the state's recycling program and establish goals for state agency recycling. This report shares information collected through a survey conducted by DGS staff to understand state agencies' current recycling measurements, metric tonnage, and progress of the State Agency Recycling Initiative.

BACKGROUND

EO17 (2022) directed all executive branch agencies, including institutions of higher education, to increase awareness of the importance of recycling and better capture recyclable material. It also encouraged the use of post-consumer recycled (PCR) products and biodegradable materials.

The State Agency Recycling Initiative dictates that Commonwealth employees should be notified of recyclable material collection areas, including, but not limited to, newspapers, office papers, corrugated boxes, folding cartons, glass containers, plastic bottles, plastic containers, plastic film, and metal cans, through clearly visible signage posted in recyclable material collection areas. The signage should include information regarding the value of waste diversion. Agencies are instructed to work with DGS or building owners, local waste management companies, and recycling facilities to ensure access to recycling programs that accept all recyclable materials the agency uses. Additionally, EO 17 tasked DGS with cataloging the metric tonnage of the state's current recycling program.

METHODOLOGY

To collect information regarding Virginia state agencies' current recycling efforts, DGS created and distributed an online survey to all executive branch state agencies, including state institutions of higher education and cabinet secretaries.

The survey contained 14 questions and took approximately 10 minutes to complete. Of the 14 questions, five requested information about the responding agency, five inquired about the responding agency's recycling plans, two asked questions specific to the responding agency's recycling metrics, and two queried about future interests and goals. The survey was sent to 101 recipients comprised of executive branch agencies, including state institutions of higher education (Population: N=101), of which 47 different agency responses were received (Sample: n=47). For the questions that did not receive responses, due to the respondent skipping the question or providing incomplete information, those numbers are shaded in the findings and utilized to calculate 100% reporting on the data received.

FINDINGS AND DISCUSSION

Analyzing the data collected aided in identifying areas by which agencies improved recycling efforts and what factors are most important to agencies in establishing goals for future recycling initiatives. Open-ended questions, which allow the respondent to report more than just a “yes” or “no” answer, were intended to capture comments based on the respondent’s knowledge, feeling, and understanding of their recycling program and efforts. Visualization and analysis of the data are explored more in the following context.

Questions #1 through #5 were collected as basic identification and contact information for each agency that submitted a response to the survey.

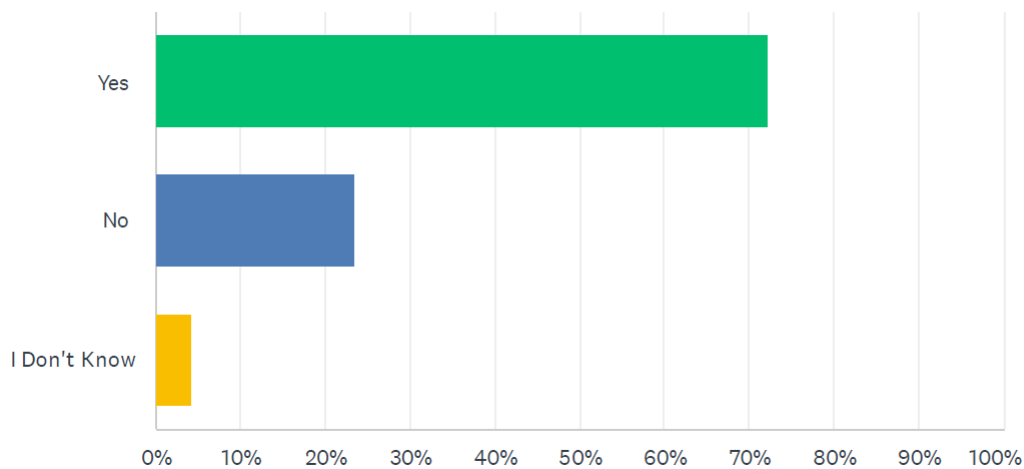
QUESTION #6

Does your agency have a recycling plan to increase awareness of the importance of recycling, capture recyclable material, as well as encourage the use of post-consumer recycled products and biodegradable materials in accordance with Executive Order 17?

Answered: 47

Skipped: 0

§ 10.1-1414. Code of Virginia Definitions: "Recycling" means the process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product which may or may not be similar to the original product.



Yes = 72%

No = 24%

I Don't Know = 4%

TOTAL 100%

The numbers reported in **2023** were:

Yes = 62%

No = 33%

I Don't Know = 5%

TOTAL 100%

The data suggests progress in promoting recycling among state agencies, a positive trend.

Key highlights include:

- 72% of state agencies have a recycling plan, indicating a strong commitment to sustainability.
- A notable increase from 62% in the 2023 EO 17 Survey, showing improvement over time.
- However, there's still room for growth, as 28% lack a plan or are unsure.
- This progress is encouraging, but continued efforts are necessary to reach 100% adoption and maximize environmental impact.

QUESTION #7

If you answered no to question #6 indicating that your agency does not have a recycling plan, please select the appropriate response to describe your agency's current status regarding a recycling plan:

Answered: 11

Skipped: 36

- My agency is in the process of developing a recycling plan = 36 %
- My agency has developed and is in the process of implementing a recycling plan = 0 %
- My agency will not be developing or implementing a recycling plan = 64%

Agencies should assess the following issues and develop a plan to improve outcomes:

- Resource constraints: identify funding, personnel, or infrastructure.
- Knowledge gaps: improve understanding of recycling best practices or benefits.
- Prioritization: prioritize recycling along with other goals
- Policy or regulatory barriers: Support or provide better guidance from higher-level authorities.
- Implementation challenges: Identify challenges in executing recycling programs effectively.

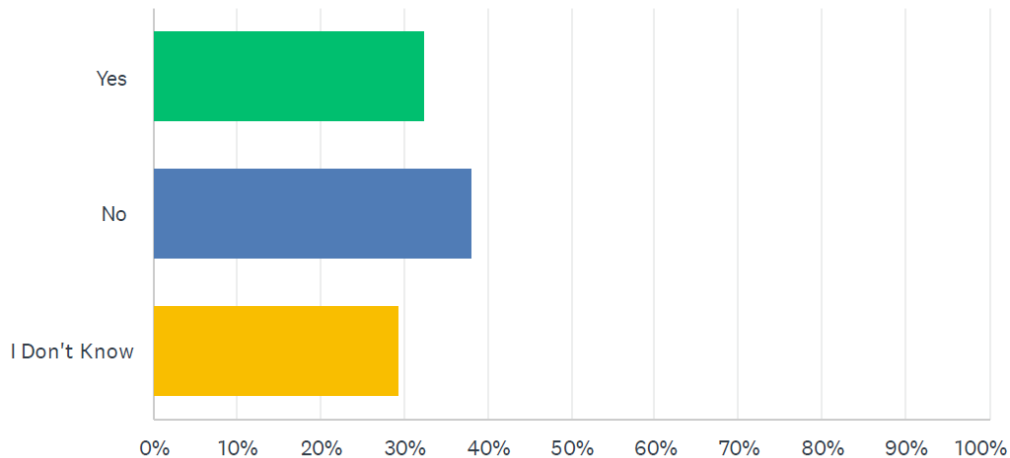
By identifying the root causes, targeted strategies can be developed to address these obstacles and move closer to 100% adoption of recycling plans among state agencies.

QUESTION #8

Is your agency recycling plan included in the onboarding process for new employees?

Answered: 34

Skipped: 13



Yes = 32% No

= 38%

I Don't Know = 30%

TOTAL 100 %

A notable gap exists between having a recycling plan (72%) and integrating it into new employee onboarding (32%). This discrepancy suggests:

- Limited employee engagement: Educate new employees about the agency's recycling efforts.
- Potential knowledge gap: Incorporate employees' role in implementing the recycling plan.
- Missed opportunity: The Agency's recycling efforts should be included in the agency's onboarding policies to instill sustainability values and practices.

By integrating recycling plans into onboarding, agencies can foster a culture of sustainability, ensure broader participation, and enhance the effectiveness of their recycling efforts.

QUESTION #9

Please explain why you will not develop or implement a recycling plan (ex: no vendors available, remote location, etc.)

Answered: 7

Skipped: 40

The 7 responses received are as follows:

1. Agency is small – under 20 employees.
2. Individuals I recycle on their own.

3. Although a 2021 recycling plan exists, the landlord does not participate in recycling activities.
4. The agency is located in a DGS-owned facility. DGS provides recycling bins to all staff.
5. In a leased space utilize recycling provided by the landlord.
6. In a private facility.
7. Located at a University and follow the school's recycling protocols.

Key themes include:

- Size and scope: Smaller agencies (e.g., <20 employees) may not prioritize recycling plans.
- Individual initiative: Some rely on employees' personal recycling habits.
- External limitations: Landlord or facility management may not support or participate in recycling.
- Existing infrastructure: Some agencies benefit from recycling services provided by landlords or facility managers (DGS).
- Shared facilities: Agencies in shared or leased spaces may follow existing recycling protocols.

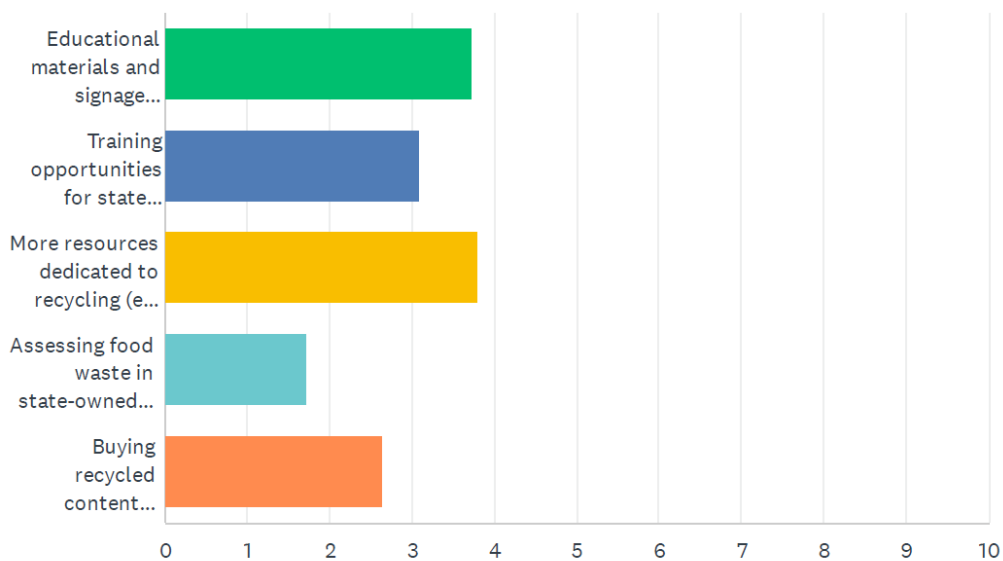
These factors highlight the need for:

- Tailored solutions for small agencies.
- Education and encouragement for individual recycling practices.
- Collaboration with landlords and facility managers.
- Clear guidelines for agencies in shared or leased spaces.

QUESTION #10

Rank the following in terms of HIGH priority to LOW priority for your agency:

Answered: 45
Skipped: 2



The rankings provide clear guidance on where to focus efforts to enhance recycling in state agencies.

Top Priorities:

1. More resources dedicated to recycling (Score: 3.80)
 - Increase recycling infrastructure (bins, containers)
 - Offer incentives for recycling participation
 - Elevate recycling priority within the agency culture

2. Educational materials and signage (Score: 3.73)
 - Develop and distribute informative materials on Virginia recycling practices
 - Install clear signage indicating recycling guidelines and locations

Lowest Priority:

1. Assessing food waste (Score: 1.73)
 - This suggests that agencies may not see food waste reduction as a critical aspect of their recycling efforts or may already have adequate systems in place.

To act on these findings:

- Allocate the budget for additional recycling resources and infrastructure.
- Develop and disseminate educational materials and signage.
- Review and revise agency policies to prioritize recycling.
- Consider revisiting food waste assessment in the future or exploring alternative approaches.

By addressing the top priorities, agencies can enhance their recycling programs, increase employee engagement, and contribute to a more sustainable future.

QUESTION #11

Do you know the weight of the items you recycle?

For example: 78 pounds of office paper recycled each month?

Answered: 47

Skipped: 0

The data from Question #11 reveals:

58% of agencies reported no weight data

19% were unsure

23% provided weight data

This suggests:

- Underreporting: Actual recycling efforts may be higher than reported.
- Lack of tracking: Many agencies do not monitor or record recycling weights.
- Knowledge gap: Agencies may not have the necessary data or understanding.

QUESTION #12

If you answered YES to question 10, please list the recycled items, weight, and timeframe in which they are collected (*Ex: 78 lbs per month, or two tons per year*).

Answered: 11

Skipped: 36

The data collected in Question #12, in comparison with the data collected to this same question in 2023 shows a notable decrease in survey results over the past 2-year timeframe:

2024: 104.58 metric tons (reporting from 11 agencies)

2023: 698.70 metric tons (reporting from 14 agencies)

Possible explanations:

- Fewer agencies reported: A smaller sample size may contribute to a lower total.
- Reduced recycling activity: Actual decrease in recycling efforts or materials.
- Improved or non-improved reporting accuracy: More precise measurements or estimates.
- Calculations are reported on the fiscal year of 2024 versus the calendar year of 2024, resulting in underreporting.
- An agency cannot track recycling at some facilities where the recycling is comingled for the entire building, resulting in under- or over-reporting.

QUESTION #13

What is your agency's goal to improve recycling at your agency for the calendar year 2025?

Answered: 46

Skipped: 1

The responses to this question were all positive and appeared forward-thinking in the realm of recycling. Most common responses centered around dedicating additional resources to employees by providing more recycling containers and signage and replacing those containers that have been moved. Dedicating additional resources could be a challenge for state agencies located in rural areas with limited funding and constrained access to recycling services.

The second most common response was concerning increasing awareness among employees about the benefits (ease/convenience) of recycling and promoting the agency's recycling plan, where available.

The other common themed responses are listed below:

- Continue current efforts and improve where possible.
- Training, which brings awareness of the importance of recycling.
- Provide more recycling bins and dumpsters.
- Improve awareness of what is and is not recyclable.
- Increase the number of items being recycled.
- Ensure that new employees, through the onboarding process, are aware of the agency's recycling plan.

- The goal is to improve the collection of cardboard and plastics by 10%
- Improve office signage.
- Improve our recycling efforts at large-scale special events (Ex. single-use plastics).
- Provide employees with information regarding the amount of recycling that is measured, how it is measured, and how it is separated.

QUESTION #14

Are there items that your agency wishes to be able to recycle, but can't?

Answered: 46

Skipped: 1

This question was an open-ended question that allowed respondents to provide detailed answers in their own words to include opinions, experiences, and perspectives. Thirty-two (32) agencies simply answered NO to this question and the other fourteen (14) responses varied, as listed below:

1. As an agency the desire is to recycle as much as possible. The majority of our park locations are in rural communities and the recycling opportunities vary greatly. These range from no available recycling to locations that have many options.
2. Paper, plastic, and cardboard recycling across the post.
3. Plastic.
4. Yes, we often have difficulty identifying a vendor for plastics and some batteries.
5. Paper, cardboard, cans and plastics.
6. Styrofoam.
7. Discarded food.
8. Plastic bags.
9. Large cardboard boxes.
10. Plastic films.
11. Batteries.
12. Plastic and cardboard boxes.
13. Battery recycling has been mentioned, but the battery recycling programs come at a cost and require batteries to be packaged properly to reduce the risk of hazardous impacts during disposal. Plastic films and composting efforts.
14. In Fairfax County, glass must be taken to the dump and can't be deposited in our recycling bins for pick-up. It would be easier if all recyclable materials could be picked up by the same disposal company.

CONCLUSION AND GOALS

This report provides a candid assessment of Virginia's state agency recycling efforts acknowledging both progress and challenges.

The positive findings include data that reports 72% of state agencies have a recycling plan. There appears to be a desire for more resources that spotlight the prioritization of recycling efforts and emphasize the importance of signage in aiding in successful recycling.

Several challenges and opportunities include the low response rate that limits generalizability. The underreporting of recycling weights can be coupled with the lack of tracking systems and resources.

Key recommendations are:

1. Integrate recycling plans into new employee onboarding.
2. Designate a recycling point person.
3. Utilize DEQ guidance and resources.
4. Develop a standard formula for measuring recycling metric tons.

DGS and DEQ will continue supporting Virginia state agencies' recycling efforts. By addressing the challenges and monitoring the progress, Virginia can enhance its state agency recycling initiatives, promote sustainability, and achieve EO17 goals.

APPENDIX A
EXECUTIVE ORDER #17



*Commonwealth of Virginia
Office of the Governor*

Executive Order

NUMBER SEVENTEEN (2022)

RECOGNIZING THE VALUE OF RECYCLING AND WASTE REDUCTION

By virtue of the authority vested in me as Governor, I hereby issue this Executive Order to recognize the value of recycling, to help create new clean technology jobs, and to help stop food waste.

Importance of the Initiative

Americans today recycle less than they did a generation ago, yet there are more opportunities for post-consumer recycled products than ever before. Recycling and reuse activities account for over 750,000 jobs nationwide. Food waste comprises the single largest category of waste by volume disposed of in landfills. We need to conserve our natural resources, reduce the amount of recyclable materials and waste that goes into landfills, and promote new clean energy jobs here in Virginia. Recognizing and promoting the importance of recycling has the potential to positively impact the Commonwealth's environment, providing cleaner air and water, as well as create new clean technology jobs.

Directive

Accordingly, pursuant to the authority vested in me as the Chief Executive Officer of the Commonwealth, and pursuant to Article V of the Constitution of Virginia and the laws of the Commonwealth, I hereby order my administration to take the following actions to address our ideals of environmental stewardship:

1. Recognition of the Value of Recyclable Material

A. State Agency Initiative to Encourage Recycling

It is the policy of the Commonwealth, and all executive branch state agencies, including state institutions of higher education, and their concessioners (Agency or Agencies) to increase awareness of the importance of recycling and better capture recyclable material, as well as encourage the use of post-consumer recycled (PCR) products and biodegradable materials.

In accordance with the State Agency Recycling Initiative, employees of the Commonwealth should be notified of the recyclable material collection areas, including, but not limited to, newspapers, office papers, corrugated boxes, folding cartons, glass containers, plastic bottles, plastic containers, plastic film, and metal cans through clearly visible signage posted in recyclable material collection areas. The signage should include information regarding the value of waste diversion.

It shall be the official responsibility of Agencies to work with the Department of General Services, or building property owners and local waste management companies and recycling facilities, as appropriate, to ensure access to recycling programs that accept all Agency collected materials. .

B. Virginia State Parks Plan

The Department of Conservation and Recreation, shall report to the Secretary of Natural and Historic Resources with an assessment plan for a Virginia State Parks Campaign in accordance with the State Agency Recycling Initiative to determine the necessary resources to increase the capacity to capture recyclable materials, including increasing the recycling receptacles in Virginia's State Parks and necessary requests for resources to implement the Virginia State Parks Plan. The campaign should be developed in partnership with the Virginia Green Travel Alliance to promote the parks' recycling initiatives to the public.

2. Making Virginia Home to New Clean Technologies

A. The Waste Diversion and Recycling Task Force shall discuss ways to encourage new recycling related businesses, including collection, processing and manufacturing facilities, to locate in the Commonwealth and include any recommendations in their next report.

B. Within 12 months the Department of Environmental Quality, in conjunction with the Department of Commerce and other stakeholders as appropriate, will produce a report outlining opportunities for attracting PCR product business entities to the Commonwealth. The report shall identify:

1. The waste-stream requirements for PCR companies to locate within the Commonwealth.
2. Identify incentives offered to PCR companies in other States and identify feasible options in the Commonwealth.

3. Identify potential geographic areas within the Commonwealth to focus on new clean technology business development, with particular emphasis in rural areas.

3. Stopping Food Waste

Food waste is the single largest substance by volume sent to solid waste sites across Virginia and the United States. While Virginia families are struggling to put food on the table and our farmers are struggling to feed their livestock and fertilize their crops we must divert this waste stream to benefit people and farmers in need.

The Department of Environmental Quality in conjunction with the Department of Agriculture and Consumer Services shall work in partnership with large-scale suppliers of food such as food manufacturers, grocery retailers, sports arenas, schools, hotels and banquet facilities to identify appropriate strategies to reduce food waste in their respective sectors by encouraging donations to needy individuals, food for animals or for composting purposes.

4. Annual Report to Increase Transparency

The Department of General Services shall catalog the metric tonnage of the state's recycling program and establish goals by December 31, 2022 for each succeeding year for state agency recycling through 2025.

The Department shall report to the Governor and the Chairs of the House Agriculture, Chesapeake, and Natural Resources Committee and the Senate Agriculture, Conservation, and Natural Resources of the progress of the State Agency Recycling Initiative by no later than December 1, 2022, and each succeeding year.

5. Exclusions

Nothing in this Order shall restrict any Agency from using any items as necessary to respond to any executive action declaring a state of emergency or order of public health emergency that would otherwise be restricted in use by this Order.

This Executive Order rescinds and replaces Executive Order No. 77 (2021) issued by Governor Ralph S. Northam.

Effective Date

This Executive Order shall be effective upon its signing and shall remain in full force and effect unless amended or rescinded by further executive order.

Given under my hand and the Seal of the Commonwealth of Virginia this 7th day of April 2022.



A handwritten signature in black ink, appearing to read "Glenn Youngkin".

Glenn Youngkin, Governor

Attest:

A handwritten signature in black ink, appearing to read "Kay Coles James".

Kay Coles James
Secretary of the Commonwealth

APPENDIX B
SURVEY QUESTIONS

Q1 Agency name

Q2 Agency head name

Q3 Your name and title, if not agency head

Q4 Enter the email of an appropriate Executive Order 17 contact for your agency.

Q5 Did your agency provide a response to the Executive Order 17 Recycling Survey distributed by the Department of General Services (DGS) in 2023?

Q6 Does your agency have a recycling plan to increase awareness of the importance of recycling, capture recyclable material, as well as encourage the use of post-consumer recycled products and biodegradable materials in accordance with Executive Order 17?

Q7 If you answered NO question 6, please select the appropriate response to describe your agency's current status regarding a recycling plan:

Q8 Is your agency recycling plan included in the onboarding process for new employees?

Q9 Please explain why you will not develop or implement a recycling plan (Ex: no vendors available, remote location, etc.)

Q10 Rank the following in terms of HIGH priority to LOW priority for your agency:

- Educational materials and signage regarding recycling in Virginia
- Training opportunities for state employees on how and what to properly recycle in Virginia
- More resources dedicated to recycling (ex. recycling bins or containers, incentives, higher level of priority and ingrained as a part of the agency culture)
- Assessing food waste in state-owned buildings or leased spaces
- Buying recycled content products

Q11 Do you know the weight of the items you recycle? For example: 78 pounds of office paper recycled each month?

Q12 If you answered YES to question 10, please list the recycled items, weight, and timeframe in which they are collected.

Q13 What is your agency's goal to improve recycling at your agency for the calendar year 2025?

Q15 Are there items that your agency wishes to be able to recycle, but can't?