

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

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 draw conclusions about state agencies' current recycling measurements, metric tonnage, and progress of the State Agency Recycling Initiative.

BACKGROUND

The issuance of 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, as well as encourage the use of post-consumer recycled (PCR) products and biodegradable materials.

The State Agency Recycling Initiative, dictates that 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.

Agencies are instructed to work with DGS or building owners, along with 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 15 questions and took approximately 10 minutes to complete. Of the 15 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 three queried about future interests and goals. The survey was sent to 172 recipients comprised of executive branch agencies, including state institutions of higher education, and cabinet secretaries (Population: N=172), of which 40 different agency responses were received (Sample: n=40). For the questions that did not receive a total of 40 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 that was 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.

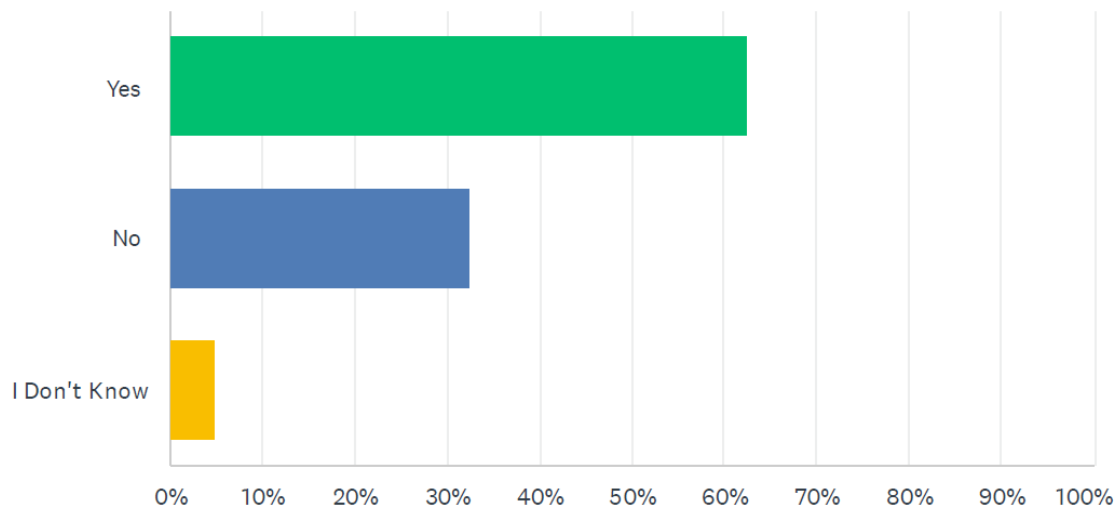
QUESTION #6

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: 40

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 = 62%

No = 33 %

I Don't Know = 5 %

TOTAL 100 %

QUESTION #7

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

Answered: 16

Skipped: 24

My agency is in the process of developing a recycling plan = 69 %

My agency has developed and is in the process of implementing a recycling plan = 31 %

My agency will not be developing or implementing a recycling plan = 0%

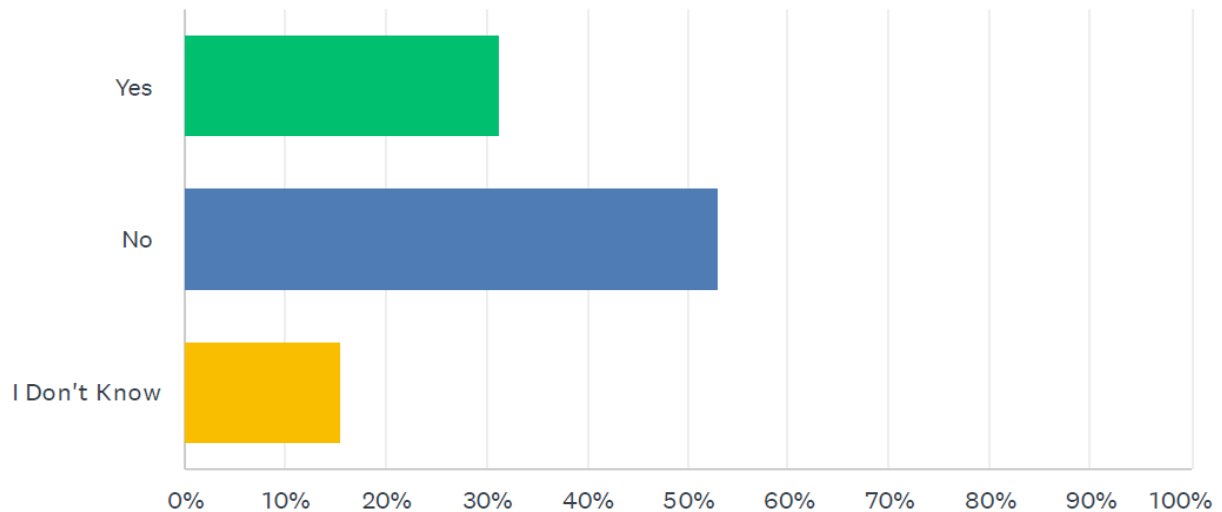
TOTAL 100 %

QUESTION #8

If you answered YES to question 6, is your agency recycling plan included in the on-boarding process for new employees?

Answered: 32

Skipped: 8



Yes = 31%

No = 53 %

I Don't Know = 16 %

TOTAL 100 %

QUESTION #9

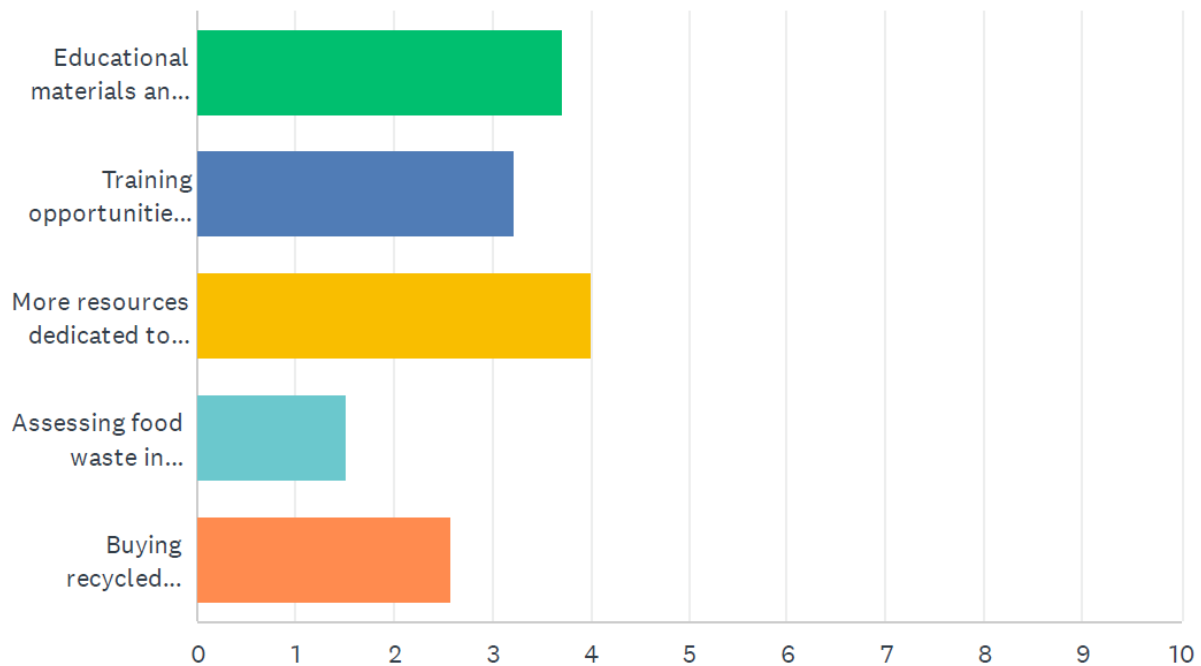
Rank the following in terms of HIGH priority to LOW priority for your agency:

Answered: 37

Skipped: 3

- 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

The responses received indicate that the most popular ranking (highest) was *More resources dedicated to recycling (ex. recycling bins or containers, incentives, higher level of priority and ingrained as a part of the agency culture)* with a SCORE of 4.00, followed by a close second, *Educational materials and signage regarding recycling in Virginia* with a score of 3.70. The lowest priority ranking was *Assessing food waste in state-owned buildings or leased spaces* with a SCORE of 1.51.



QUESTION #10

Do you know the weight of the items you recycle?

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

Answered: 40

Skipped: 0

Yes = 22%
No = 53%
I Don't Know = 25%

TOTAL 100 %

QUESTION #11

If you answered YES to question 10, please list the recycled items, weight, and timeframe

Answered: 14

Skipped: 26

Of the 14 responding agencies, six did not know the weight of the items recycled by the agency, and one answered "To Be Determined" for the 2023 calendar year. The remainder of the responding agencies provided an estimate or actual weighted measurements of the items the agency recycles. The resulting total weight of recycled items reported is 698.70 metric tons.

Had more respondents not skipped this question, the final reported number would likely be higher. Question #10 provided some insight into why the final number of weight in metric tons may be low, as only 22% of respondents indicated that they know the weight of their recycled items, while the majority of 78% reported "No" or that "I Don't Know" the weight.

QUESTION #12

What is your agency's goal to improve recycling at your agency for the calendar year 2024?

Answered: 36

Skipped: 4

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

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

The common themed responses are listed below:

- Review and refresh existing signage. Ensure recycle bins are properly located and replace those that have been moved.
- Improved messaging and container placement across campus.

- Post informational resources to the agency's intranet page.
- Increase awareness of recycling.
- To increase employee awareness of the Agency Recycling Plan, increasing signage that delineates the range of items that can be recycled and increase the availability of appropriate recycling containers.
- Continue to follow our property management recycling plan.
- Refer to DGS, as property managers, and the recycling plan in state-owned buildings and spaces.
- increase our recycling activities.
- Purchasing additional receptacles for the campus.
- Our agency continues to participate in recycling at our agency by providing a recycling bin for boxes, paper, and plastic as well as recycling ink toner cartridges.
- More clear signage on bins to better inform employees.
- Implement or review the recycling plan.
- Increase yearly amount/increase recyclables by at least 5%.
- Increased recycling opportunities; significantly increased digital processing vs paper; and plan to implement awareness and training communications.
- Create a stronger, more resilient, and cost-effective recycling system.
- Unsure if items are truly recycled or not when taken out.
- Continue to purchase when appropriate recycled products.
- Continue using recycling bins and look for vendors that use recycled products.
- Look for more products that can be recycled.

QUESTION #13

The next two questions are specific to “plastic film,” which is defined as a thin sheet of (usually plastic and usually transparent) material used to wrap or cover items.

Examples include: grocery bags, garment bags, retail bags with string ties removed, newspaper bags, dry cleaning bags, produce bags, bread bags, cereal bags (but if it tears like paper, do not include it), over wrap from paper products (paper towels, toilet paper, etc.), stretch/shrink wrap, zip top food storage bags, bubble wrap, air pillows (must be deflated), shipping envelopes and bubble mailers (must be all film plastic, labels removed), furniture and electronic wrap, and ice bags (must be dry).

My agency currently recycles "plastic film."

Answered: 40

Skipped: 0

Yes = 20%

No = 73%

I Don't Know = 7%

TOTAL 100 %

The overwhelming response to this question was “No”, however, there appears to be interest within state agencies to have the ability to recycle plastic film if they were provided with the necessary resources (see responses to Question #14 below).

QUESTION #14

My agency would be interested in recycling “plastic film” if we had the necessary resources available by our building owner, local waste management company, or recycling facility.

Answered: 39

Skipped: 1

Responses:

Yes = 59%

No = 18%

Other = 23%.

TOTAL 100 %

The comments that were received as a response to OTHER can be summarized as:

- Some agencies being too small so that the outputs/outcome might not be worth the effort/resources.
- Plastic films are not common or being utilized, so it would not be feasible to develop a recycling plan for this.

QUESTION #15

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

Answered: 31

Skipped: 9

Responses:

No = 14 out of 31 responses received.

The other 17 responses varied and included the following:

- Plastic bottles, aluminum cans, junk mail, catalogs; we do reuse plastic packaging materials;
- Small electronics, batteries, glass
- Food waste, Styrofoam, plastic film, clothing (for charity)
- Wood products such as packing crates
- Plastics including injection molded, rigid plastics and Styrofoam
- Items that cannot be surplused
- Looking into alkaline batteries, other streams

CONCLUSION AND GOALS

It is important to note that the response rate, or sample size, was lower than expected at twenty-three percent (23%). A smaller sample size invariably leads to a decrease in reliability and limiting the effect of generalizability. More responses would be necessary to offer meaningful analysis or draw conclusions on the actual state of agencies' recycling efforts.

However, looking at the generalizability challenge from a pragmatic point of view, the results are useful in several ways. There is room for improvement to increase recycling knowledge and practices throughout the Commonwealth of Virginia. The data shows that most agencies (62%) have a recycling plan in place, but only 31% include their recycling plan in the onboarding process for new employees.

Respondents also indicated that they would like more resources dedicated to recycling (ex. Recycling bins or containers, incentives, higher level of priority and ingrained as part of the agency culture [reference Question #9]). Simply requiring state agencies to introduce the agency's recycling plan and provide information about recycling efforts during the onboarding process would serve as a no-cost way to elevate the importance and priority of recycling as part of the agency's culture. Agencies also could consider identifying a recycling point person to handle tasks such as answering employees' questions, program oversight, and managing the recycling team, if applicable.

Signage, as required in EO17, was also identified as important to the success of recycling efforts within state agencies [reference Question #9, #12]. The Virginia Department of Environmental Quality (DEQ) provides guidance on recycling topics and programs, which includes access to signage. DGS defers to DEQ when it comes to best management practices established for recycling programs and efforts.

When focusing on the task to catalog the metric tonnage of the state's recycling program, the challenge is, and remains, that Virginia does not appear to have a standard formula or statewide metric to use in determining the actual weight in metric tons. Some agencies may not have access to resources that measure weight of recycling items and/or know who to contact in this regard. It is also worth noting that many agencies, particularly in Capitol Square, are located in buildings where the amount of recycled material is not calculated or provided for each individual agency, but, rather for the entire building.

DGS will continue to collect information on the progress of the State Agency Recycling Initiative and will serve as a resource, along with the DEQ, for agencies in their efforts to meet the requirements of EO17.

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 2022?

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?

§ 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.

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

Q8 If you answered YES to question 6, is your agency recycling plan included in the on-boarding process for new employees?

Q9 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

Q10 Do you know the weight of the items you recycle? For example: 78pounds of office paper recycled each month?

Q11 If you answered YES to question 10, please list the recycled items, weight, and timeframe

Q12 What is your agency's goal to improve recycling at your agency for the calendar year 2024?

Q13 The next 2 questions are specific to “plastic film” which is defined as a thin sheet of (usually plastic and usually transparent) material used to wrap or cover things.

Examples include: grocery bags, garment bags, retail bags with string ties removed, newspaper bags, dry cleaning bags, produce bags, bread bags, cereal bags (but if it tears like paper, do not include it), over wrap from paper products (paper towels, toilet paper, etc.), stretch/shrink wrap, zip top food storage bags, bubble wrap, air pillows (must be deflated), shipping envelopes and bubble mailers (must be all film plastic, labels removed), furniture and electronic wrap, and ice bags (must be dry).

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Q14 My agency would be interested in recycling “plastic film” if we had the necessary resources available by our building owner, local waste management company, or recycling facility.

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