CARE 2014 Annual Report

Carpet America Recovery Effort (CARE)

CARE 2014 Annual Report

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Mission Statement

The mission of CARE is to advance market-based solutions that increase landfill diversion and recycling of post-consumer carpet, encourage design for recyclability and meet meaningful goals as approved by the CARE Board of Directors.

Vision

Post-consumer carpet diversion and recycling are economically, socially and environmentally sustainable for all stakeholders.

Core Values

We believe in:

- Market-Based solutions
- Entrepreneurship
- Hierarchy of Waste Management
- Sustainable practices (economic, social and environmental)
- Resource conservation
- Transparency
- Multi-stakeholder collaboration
- Professional ethics and integrity
- Anti-trust compliance

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CARE 2014 Leaders

Sustainability Leaders

Aquafil USA
Beaulieu of America
Interface
J & J Industries
Masland Carpets
Milliken & Company
The Mohawk Group
Shaw Industries
Tandus Centiva Flooring
Universal Fibers
Wellman Plastics

Friend of CARE

Polymers Center of Excellence

CARE Members

CARE has 197 members - please go to www.carpetrecovery.org for a complete list of CARE members.

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Message from the Chairman of the CARE Board of Directors

A typical Annual Report letter offers highlights, explains the challenges and ends with an optimistic forward look. Carpet America Recovery Effort is not your typical organization and this won't be that typical letter. As Board Chair, I'm charged with leading our governance, which includes approval of initiatives and budgets as well as fiduciary and legal responsibilities to our members. In those matters, 2014 has been a year to remember. CARE has earned a reputation for doing its best work at the 11th hour …. possibly even at the 59th minute. While this at first might lead one to suppose a lack of discipline or organization, it is rather a rallied response to each of a series of large challenges. It is the product of hard-working, dedicated teams refusing to merely give an adequate response – but the determination to struggle right to the wire to provide the very best answers – ones which withstand the tests of scrutiny, stress, and time. I would like to summarize five of those for you now.

The first was born amidst the crucible of crisis. Our nationwide network of Collector/Sorter/Entrepreneurs [CSEs] has seen steadily decreasing value from mix changes in polymer type from used residential carpet it receives. As competitors, how could the carpet industry work collaboratively to address this? Through countless hours, drafts, revisions, consultations, and approvals, the Voluntary Product Stewardship [VPS] Plan became a reality. As you read this, it is functioning to offset adversity and to preserve the CSE network – each member of which is vital and indispensable to the diversion from landfill and market-driven recovery of post-consumer carpet.

The second arose in response to recent effectiveness data in California under AB2398, for which CARE remains the stewardship organization. The Stewardship Planning Committee [SPC] and Stewardship Funding Oversight Committee [SFOC] worked through myriad details, multi-tab spreadsheet intricacies, interactive modeling, and lots of open honest communication to arrive at Plan modifications including an assessment fee increase. This ongoing process of adjustment and observation has received diligent attention, thought, and effort since 2011.

The third is perhaps of greatest significance – emergence of the state level Working Group model. I'd invite you to click: https://carpetrecovery.org/states/ Several CARE members have worked long and hard to nurture this South Carolina initiative. Recently, the state of Illinois has encouraged CARE to form a similarly structured and purposed group within its borders. Aligning the various aims and priorities among multiple stakeholder perspectives and effectively executing on these has its challenges – but holds the promise of successful, effective results.

The fourth has been an internal work in progress for 12 months – the CARE Strategic Plan. I don't anticipate it will solve all our 11:59 angst, for this is the world and times in which we live. Yet, planning is essential and I'm very thankful for the small group that brought this forth and for the Board's engagement and support in finalizing it …. subject to future revisions, of course!

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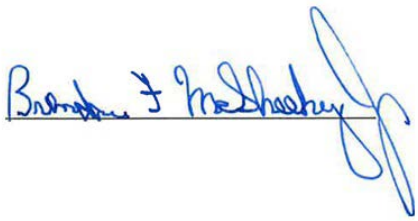
The fifth is axiomatic. “Measure first that which you seek to improve.” CARE’s annual survey results are those key measurements. Until 2014, these lacked a true mass balance framework. Through insightful, rigorous, and impartial methodology this is now fact – and a firmer foundation upon which to base accurate trending, analysis and strategic initiatives.

To sum CARE’s 2014 up, it was far from typical. It didn’t have a good year. 2014 was a great one – possibly its best so far. 2014 shouldn’t be measured in terms of accomplishments. Rather, it should be measured by CARE’s willingness to look its potential square in the eye – and to work tirelessly in fulfillment of its mission. Conventional business rhetoric states “results count more than efforts.” However, the 4th letter in our name is EFFORT. It speaks to our bedrock belief that if we expend the efforts [with focus and wisdom], the results will come. CARE’s greatest strength continues to be this dedication of its people. To thank some is to inevitably overlook the contributions of many others. Conversely, I would be remiss not to specifically recognize and appreciate our Board Directors, our Executive Director Bob Peoples, our newly promoted Operations Director Anthony Cline, Georgina Sikorski for her VPS role, CARE’s staff, our financial, legal and event service providers, and the CRI staff who generously share their time and talents.

Sincerely,



Brendan F. McSheehy

Chairman, Board of Directors
Carpet America Recovery Effort

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Message from the CARE Executive Director

Dear Fellow CARE Members,

CARE had a most rewarding year in 2014. We experienced a dynamic year in terms of challenges and accomplishments. Our programs are growing more sophisticated and our challenges, both in California and nationally, abound. In September CalRecycle found our efforts in 2013 were non-compliant. This resulted in a major reexamination of our Plan and its elements in great detail. The results were big changes in the Plan going into 2015 and the recognition an increase in the assessment would be required. More importantly was recognition that there was too little time left to dramatically increase the 2014 outcome in terms of recycled output. CalRecycle accepted this premise, but made clear dramatic "continuous and meaningful" progress was necessary in 2015.

While 2014 was a strong year, by late in the year (November) two major forces began to impact our recycling community. First was the beginning of a port slowdown on the west coast which would dramatically impact carpet recycling, and other industry sectors, well in to the New Year. Second was the slide in oil prices which undermines the value of recycled materials in the marketplace. These impacts came at the same time CARE was grappling with the surge in PET in the marketplace. In response to a request from our entrepreneur community, and after a series of negotiations, CARE announced the creation of the Voluntary Product Stewardship Program (VPS) – a two year commitment by the carpet industry to support the collector/sorter entrepreneur (CSE) community while we work to find solutions to the PET challenge. That program was launched on January 1, 2015 and provides about $4.5 Million to support CSE activities in 2015.

Overall 2014 what another challenging year, but one in which significant progress was made. I am grateful to our Operations Manager, Anthony Cline and our new CA Program Manager, Brennen Jensen. Finally, but perhaps most importantly, CARE is fortunate to have a fully engaged Board of Directors. The professionalism and energy of this group makes it possible for me to keep our efforts moving in the right direction. I am profoundly grateful for their trust and support.

Sincerely,

Robert Peoples, Ph.D.
Executive Director, CARE

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Key Results for CARE in 2014

Financial Report, 2014

2014 was a year of great change at CARE, both from a program perspective and a financial perspective. CARE finished 2014 as a $5.5 Million operation, the majority of which is the California AB2398 program. Effective January 1st, 2015, due to the Voluntary Stewardship Program launch, CARE was poised to be a $10 Million operation. Effective April 1, 2015, CARE is a $15 Million operation due to the assessment increase in California from 5 cents to 10 cents per square yard. As a result of these major program changes, CARE re-launched the Finance Committee along with formalizing accounting support for our quarterly Board reviews and budget planning.

Once again in 2014, CARE underwent a series of three independent audits. The first was an audit of CARE core operations. The second was an audit of our AB2398 financials. Finally we received a performance audit as required by CalRecycle. That is an audit against the requirements of the AB2398 statute in terms of reporting and accomplishments. In other words, did we do the things the statute requires and our approved Plan spells out. We are pleased to report that there were no material findings for CARE under any of these audits and this is a testament to the management controls put in place by our Board and the hard work of our staff (both CARE and CRI support staff).

CARE Operations

The financial operations of CARE are managed separately from its other programs. The Operations of CARE have a separate and distinct financial ledger, budget, income statement and balance sheet.

For the 2014 Annual Report, CARE reports the following summary financial statement for the CARE Operations only.

(The California AB 2398 program has a separate and distinct financial ledger, budget, income statement and balance sheet. Financial reports for this program are managed separately and reports are prepared as required by the management teams for this program.)

CARE Operations Income and Expense Statement

Net Income (Revenues minus Expenses) through December 2014 was (- $73,097). Our expenses were under budget for the year and revenue was below budget.

CARE Operations Balance Sheet:

- Cash balance at end of December 2014 was $349,261 vs. $472,916 at the end of 2013.
- Members' equity was $393,060, down by $88,095 from $481,155 in December 2013.
- CARE maintains a minimum annual $275,000 cash reserve.

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Business Results, 2014

- In 2014, CARE finished the year with 197 members after a correction in our records.
- The CARE Board of Directors conducted a 5-year strategy exercise for final review and approval at the July 2015 Board meeting in Atlanta.
- A new CARE Product catalog was released in February 2014.
- CARE launched the new web site at the annual meeting in Seattle in May 2014.
- CARE expanded Blog activities in 2014.
- CARE successfully managed the California AB 2398 program as the Carpet Stewardship Organization.

2014 CARE Annual Survey Results of the U.S. Carpet Recycling Industry

- Employment increased from 1,120 in 2013 to 1,163 in 2014, an increase of 4%.
- Total post-consumer carpet discards, based on sales, were estimated at 3.4 Billion pounds.
- Post-consumer carpet discards were estimated at 10.9 pounds per capita in 2014.
- Total gross collections were 494.3 Million pounds, down from 534 Million pounds in 2013. (Note: The mass balance approach introduced in 2013 was refined through the annual survey process.)
- Gross post-consumer carpet collection equated to 1.5 pounds per capita for 2014.
- The top 5 collector/sorters are responsible for about 50% of all gross collections.
- Gross recycle ratio (gross collected/total discards) was 14.2%. This ratio was unchanged from 2013.
- Post-consumer carpet Nylon fiber represented 61% of the collection stream, unchanged from 2013.
- PET collection was calculated to be 25% vs. 34% in 2013. Reported PET collections ranged from 0% to 50% (see details). Collector sorters work to minimize PET flow due to no market outlets.
- 54% of collected post-consumer carpet, or about 267 Million lb. went to: reused, recycle, kiln, CAAF, WtE. The remaining 45% went to the landfill.
- Of the 23% recycled output reported:
    - 49% of recycled materials went to resin and molding applications.
    - Carpet face fiber use was 18%.
    - Carpet backing use was 3%.
    - Carpet Filler use was 7%
    - Other applications represented 22% the of recycle uses.
- Waste-to-Energy (WtE) represented 8% with CAAF and kiln output reported at 23%.
- 92% of the post-consumer carpet collected was further processed in the United States.
- 91% of respondents felt CARE is meeting their business needs, up from 76% in 2013.

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- Since it was founded in 2002, CARE members have diverted over 3.63 Billion gross pounds of post-consumer carpet from landfills in the United States.
- Greenhouse gas equivalents saved was calculated to be 56,498 mTCO2E using the 2014 EPA WARM model: http://epa.gov/epawaste/conserve/tools/warm/Warm_Form.html
- GHG savings is equivalent to enough energy to power 16,736 homes for the year and conserving 15,052,622 gallons of gasoline (323,852 barrels of oil).

California AB2398 Results for January – December 2014

This section of our 2014 Annual Report will provide a brief summary of results associated with the California Carpet Stewardship Program (Program), also known as AB 2398, and associated Carpet Stewardship Plan. It is important to note, that under AB 2398, CARE is required to submit an annual report to CalRecycle. The report is due on July 1, 2015. This summary provides a high level overview of results through 14 quarters of operation (i.e., 3rd quarter 2011 through 4th quarter 2014) and highlights 2014 results. Our goal will be to examine trends over those 14 quarters and extract key lessons learned.

A copy of the 2013 report is available for download from the CalRecycle website and offers a more detailed analysis. https://carpetrecovery.org/wp-content/uploads/2014/04/AB2398_2011-2013_AnnualReport.pdf

In September 2014, CalRecycle informed CARE that we were non-compliant with the provisions of continuous and meaningful improvement under the statute. At the time the Sustainable Plan Committee (SPC) was undertaking a rigorous review of the prior year performance under the approved Plan version 3.2.2. The non-compliant finding, along with additional information from California stakeholders, resulted in significant changes to the subsidy program to further stimulate market outlets. In order to fund those increased subsidies it was necessary to request an increase in the assessment. CARE submitted this request in late December 2014 and California approved an assessment increase from 5 cents to 10 cents per square yard in early January of 2015. That increase went into effect April 1, 2015.

A copy of the current Plan, version 3.2.2, is posted at: http://www.calrecycle.ca.gov/Carpet/Program.html along with an addendum incorporating the increased subsidies and assessment.

CARE produces an AB 2398 slide deck at the end of each quarter, which summarizes results for the quarter along with comprehensive trending data since the start of the program. These quarterly reports are posted to both the CARE and CalRecycle websites and are available at: www.calrecycle.ca.gov/carpet and https://carpetrecovery.org/california-ab-2398/. The following information summarizes recent results and trends thru the end of 2014. The full 2014 California Report was posted to the CalRecycle site in July 2015.

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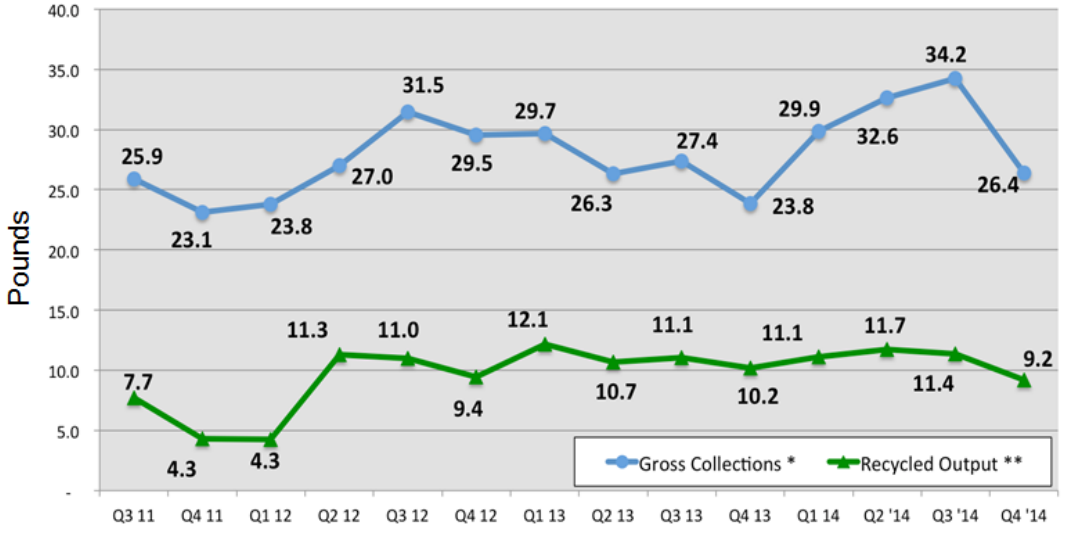
AB 2398 Results

- CARE is operating under the current version of the California Carpet Stewardship Plan approved by CalRecycle in January 2014.
- Carpet sales into California in 2014 were 98.9 Million square yards with cumulative sales of 348 Million square yards since the beginning of the program in July 2011 of.
- In 2014 an estimated 357.7 Million pounds of post-consumer carpet was destined for landfills in California and about 123 Million pounds were recovered from California landfills (about 35% diversion).
- Recycled output was 43 Million pounds (12%).
- There were 96 Million pounds of net diversion (27%).
- 77 carpet mills were registered with CARE as participants in the CARE Carpet Stewardship Plan at the end of 2014.
- Total assessments collected by the mill manufacturers registered with CARE were $4.9 Million in 2014 and $17.4 Million since the Plan went into effect in July 2011.
- In 2014, data shows 3.2 pounds of post-consumer carpet were recovered per capita in California up from 2.3 lbs. in 2013.
- Unused funds at the end of December 31, 2014 were $3.8 Million down from $4.7 Million in 2013.

Figure 1 gives a graphical trend of gross collected and recycled output pounds over the first 14 quarters. The program was implemented in the 3rd quarter, 2011. Traditionally 1Q and 4Q results are weaker due to the normal selling season cycle.

The reader is referred to the full Annual Report to CalRecycle for a detailed accounting of this program.

Figure 1: California Recovered Carpet and Recycle Output Trends



*As of Q1-2014, Gross Collections (GC) include refined data historically collected, not previously reported. These data adjust GC amounts beginning Q1-2013 through the current period.
**Beginning in Q3-2014, Recycled Output (RO) reported no longer includes estimated international recycled output. Beginning in Q1-2014, RO is adjusted to include only Type 1 + Type 2 pounds. Pounds diverted from landfill through international RO, CAAF and/or Kiln will now be reported as pounds diverted.

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DETAILS

CARE 2014 Annual Survey Results

Each year, as required by the CARE Bylaws, CARE prepares an Annual Survey to report on carpet diversion and recycling results achieved by the respondents to the Annual Survey. All information from respondents is confidential. The collected information is aggregated and analyzed for the Annual Report. An effort is made to graphically display trends.

2014 Accomplishments

2014 proved to be another year of dynamic changes for CARE. Fortunately we ended 2014 in very good position going into 2015. Our year started off with a major Board meeting in January where the dialog with the Collector/Sorter Entrepreneur (CSE) community got off to a rocky start following the 2013 revelations regarding the adverse impact of growth in PET. Continuing dialog in February and again at the annual meeting in May resulted in creation of the Voluntary Product Stewardship Program (VPS) Committee. The charter of this Committee, with representation from mills and CSEs, was to develop a 2 year program for financial support to bridge the time necessary for PET outlets to be developed. CARE played a critical leadership role in bringing the parties together and enabling dialog that ultimately led to the creation of the VPS Plan in late 2014. Members of the Carpet & Rug Institute (CRI) Board of Directors approved the Plan and budget to fund the first year in December. The program launched on January 1, 2015. Details may be found on the CARE website: www.carpetrecovery.org and clicking on the VPS Program tab.

Annual Survey Methodology

In order to form a complete picture of the national Carpet Recycling Industry, respondents were asked the following questions on the Annual Survey:

- Amount of post-consumer carpet diverted from landfills (gross collected pounds) and recycled output pounds
- Recycling versus other end-uses for the material diverted (i.e. reuse, end-product manufacturing, alternative fuel (CAAF), cement kiln, waste-to-energy, and landfill)
- Types and amounts of carpets recycled, by fiber type
- End products manufactured from recycled materials
- Steps in the recycling process performed by the respondent
- Geographical locations and employment information
- International versus domestic customers (outlets)

In addition to the quantitative information sought, CARE also requested input on the organization's performance and the value of CARE to respondents. This information is used to improve CARE's operations and resources.

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For the 2014 CARE Annual Survey, CARE contacted numerous members at a personal level as well as sending the survey to all CARE members. Of those directly contacted, 44 responded. As noted, the response rate of those who handled the vast majority of post-consumer carpet was high, providing good confidence in data quality and demonstrating a strong commitment to the mission of CARE. However, it is important to recognize that even with a higher recycler response rate, data is missing from a number of companies involved in carpet recycling. Through one-on-one level dialog, estimates of missing or mischaracterized pounds were made. Because we received responses from virtually all of the major businesses engaged in carpet recycling, we estimate that the survey includes more than 95% of the volume of carpet diverted and recycled in the U.S. in 2014. Thus, as in all previous years, it is likely that the survey captures the majority of the post-consumer carpet recycling that occurred in 2014. However, it should be noted that CARE is aware of post-consumer carpet that is collected and shipped outside the U.S., some of which may not get reported in our survey. It is estimated that this non-reported amount represents less than 5% of the gross material collected.

A copy of the complete 2014 survey tool is attached at the end of the Annual Report in Appendix 1.

As always, CARE assessed the responses received and followed up as needed with individual companies to maximize participation and to ensure we minimize (or eliminate) double-counting wherever possible. By doing so, the reported data is more accurate and reflects a truer picture of the amount of carpet diverted and recycled in 2014. The survey has become more sophisticated over the years in working to avoid double counting. The 2014 survey was modified again this year based on lessons learned in 2013 to do a better job on the mass balance approach.

CARE makes no warranty as to the accuracy of this data and assumes no responsibility or liability for how this information is used by individuals or companies and makes no warranties for its use.

Evaluation of Progress in 2014

Carpet Discard Methodology

In 2011, the CARE BOD adopted a formula for calculating carpet discards, which more accurately reflects actual sales and carpet discards in the United States. CARE believes the formula provides a more accurate picture of both gross collections and recycling rates for annual reports. In the fall of 2012, CalRecycle agreed to the use of this formula for calculations involving post-consumer recycling in California.

The purpose of the methodology is to be able to update the discards on an annual basis, using actual sales data, and upgraded by factors that influence the calculation. Those factors include changes in imports/exports, percent of the market that is replacement, average face weight, deselection, and demolition rate.

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Formula for Calculating Carpet Discards

The approved formula for calculation of discards is:

$$\text{Discards} = (((\text{Sales} * R) * P) + D + DS)$$

The factors used to calculate the amount of carpet available for diversion include:

S= Carpet Sales in the US for the reporting period (square yards)
Sales Data comes from Torcivia Market Insights, an independent market research firm, who is collecting the confidential sales data from carpet manufacturers doing business in the US.

R= Percent of carpet that is replacement, or carpet replacing existing carpet.
Replacement carpet is the carpet destined for the landfill. The carpet industry has worked with Torcivia Market Insights to quantify the replacement rate to be 82% currently.

P= Average weight of carpet per square yard.
In 2012, the average weight was 4.2 pounds/square yard and this number was reconfirmed in 2013. (Raw data was supplied by the industry and analyzed by CARE. Weighted averages of carpet weights of broadloom and tile used in the commercial and residential sectors were calculated.)

D= Pounds of carpet from demolition projects not replaced.
In 2014, the weighted demolition rate (85% residential and 15% commercial) was estimated at 0.55%, (estimate provided by Torcivia Market Insights). D is converted to pounds by multiplying Sales x R x P.

DS= Deselection pounds resulting from a decision to rip out old carpet and not replace it with new carpet. The overall deselection estimate is ca. 0.75% per year.

Note that the term demolition represents the teardown of a building. There is no easy way to know the actual square yards of carpet coming out of such a process. By assuming the actual demolition rate obtained from Marketing Insights/Torcivia we are likely overestimating the total volume of carpet sent to landfill. However, this is a tiny fraction (<1%) of the overall amount and does not significantly alter the flow.

Deselection is a separate element of the PCC flow to landfill. CARE has always assumed this parameter to be very small (<1%). CARE worked to develop a more quantitative estimate of deselection in 2014. Based on an analysis of historical data back to 1975, in 5 year increments, it is estimated that deselection

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represents <0.75% per year. Based on 2014 total estimated discards of 3.4 Billion pounds, deselection equates to an estimated 25 Million pounds.

It should be noted that both demolition and deselection estimates are well within the error associated which our discard and recycle estimates.

Application of the formula to generate discards is shown in the following example using actual U.S. data from 2014 and rounded for clarity.

Discards = (((Sales * R)* P) + D + DS)

Sales 2014: 982 Million square yards

Discards = (982*0.82*4.2) = 3,382 Million pounds + D +DS

Where D = 3,382*0.0055 = 19 Million pounds

Where DS = 3,382*0. 0075 = 25 Million pounds

Thus, Discards = 3,382 + 19 +25 = 3,426 Million pounds

Post-Consumer Carpet Collection and Recycling: Quantitative Results for 2014

CARE continues to work to quantify metrics necessary to understand the marketplace for carpet recycling in the United States. It is important to recognize that CARE discloses and works with the data as received. These numbers have been voluntarily given to CARE by the independent post-consumer carpet sorters and processors that are members of CARE. CARE has not audited the numbers nor does CARE guarantee the accuracy of the numbers submitted.

- 494 Million pounds of gross collected post-consumer carpet in 2014 = Diversion Rate of 14%.
- 229 Million pounds of post-consumer carpet was recycled in 2014, a recycling rate of 6.8% (inclusive of U.S., international, CAAF, kiln output, excluding WtE).
- Recycled output yield was 46%. (Output/gross collection)
- 3.6 Billion Pounds of cumulative diversion since 2002.

Table 1 shows a comparison by pounds and percentage of the quantity of post-consumer carpet recycled and diverted from landfill from 2002 through 2014, using the new methodology for measuring carpet discards and a mass balance calculation of input based on measured pounds of outputs. The new mass balance of outputs method, Figure 3, assumes the sorters and processors accurately know their weight of goods sold and shipped to customers, landfill, WtE or kilns since there are profits or costs associated with these shipments. Reported pounds received on the front end are considered gross estimates since most loads are NOT weighted. Therefore, by adding everything that goes out, one can, with better accuracy,

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measure what came in. CARE has been able to close the gap between directly reported gross collections and using the mass balance approach to within approximately 10%. This is considered well within our error range.

Table 1: Post-Consumer Carpet Recycling and Diversion Statistics, 2002-2014

Millions of pounds

	Actual (million pounds)												
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Discards*	4,409	4,396	4,588	4,916	4,687	4,560	4,228	3,718	3,373	3,816	3,540	3,703	3,426
Diversion													
Reuse	9	0	0.3	0	0	0	4	12	2	1	5	12	2
Recycled Output**										250	294	185	114
Int'l Recycle Yield (23%)													10
Total Recycled	46	87	98	194	239	275	243	246	271	250	294	185	124
Total Reuse + Recycle	55	87	98.3	194	239	275	247	258	273	251	299	197	126
Recycling Rate	1%	2%	2%	4%	5%	6%	6%	7%	8%	7%	8%	5%	4%
Waste-to-Energy	1.9	7	9	27	21	19	41	47	38	46	42	58	41
CAAF + Cement Kiln	0	0	1	3	0	2	2	12	26	36	11	23	113
Gross Int'l Shipments													41
Other Internal Use													74
Sent back to Landfill													224
Gross Diversion	57	94	108	224	260	296	290	317	337	333	352	534	494
Gross Diversion Rate	1%	2%	2%	5%	6%	6%	7%	9%	10%	9%	10%	14%	14%
Net Diversion***													270
Net Diversion Rate													8%

* Total Discards calculation includes deselection (DS) for the first time in 2014 numbers

** Includes a 23.4% yield on int'l lbs. for the first time in 2014 (9.5M lbs.)

*** Net diversion is gross diversion - pounds sent to landfill

Coral colored cells are new data categories in 2014

Figure 2 is a plot of the historical trend of gross pounds of post-consumer carpet collected each year since 2002. In 2014 recyclers reported 494 Million pounds of gross collection.

Figure 3 is a mass balance block diagram showing how the outputs were used to back calculate inputs. For definitions of the terminology used in this report, please see Appendix 2.

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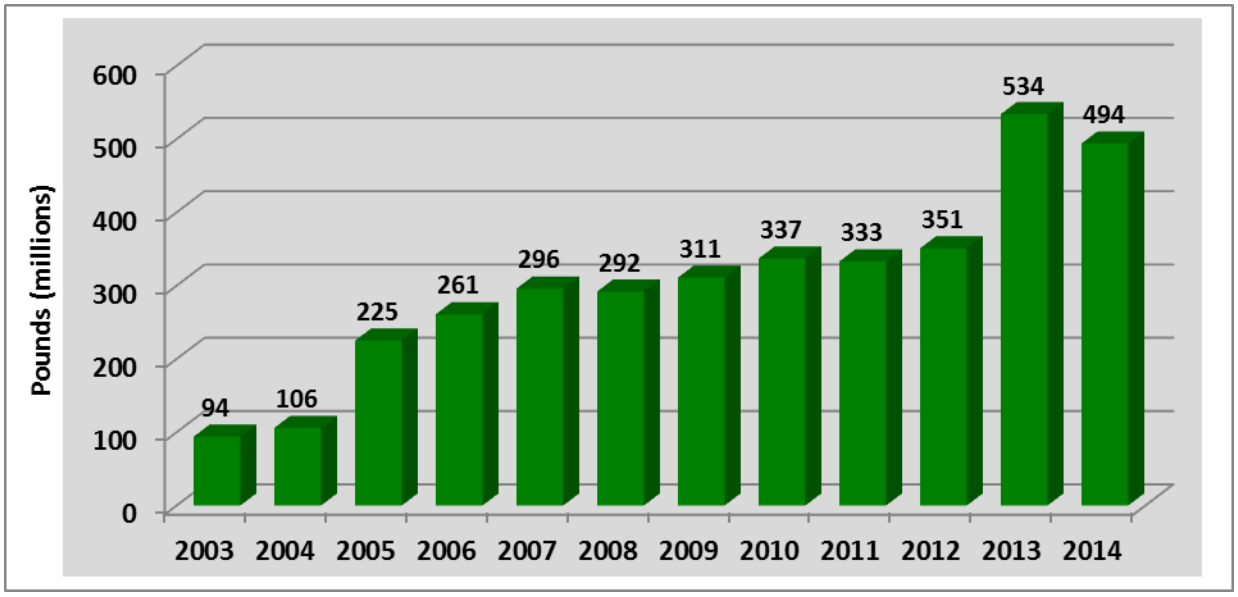
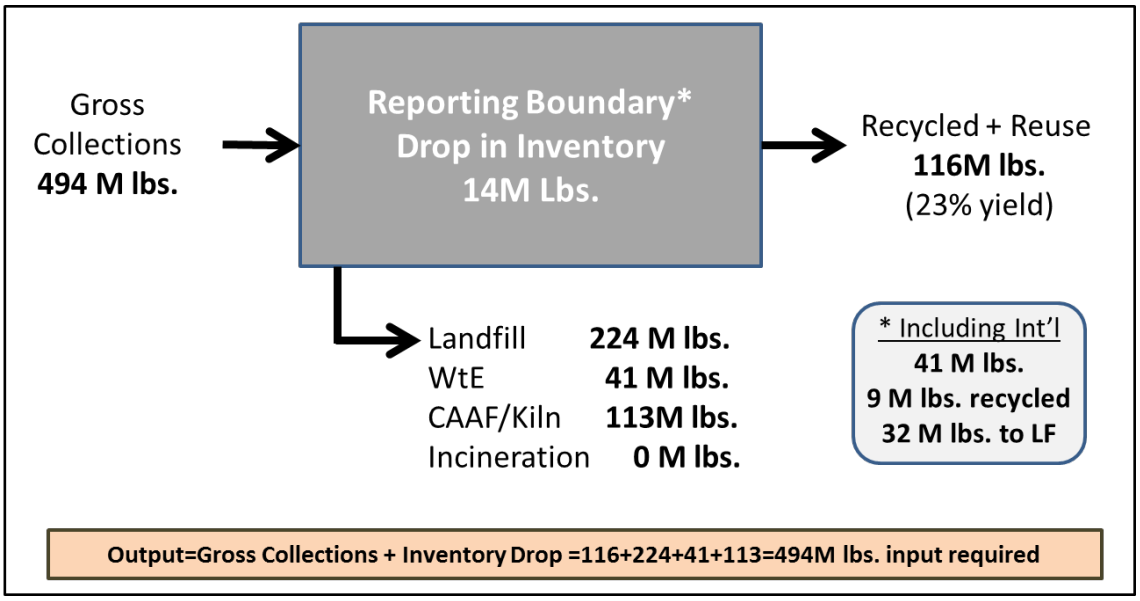
Figure 2: Historical Post-Consumer Carpet Diversion, 2002-2014



As a reminder, because 2012 was the last year of the original MOU (MOU 2002) the reader is directed to the 2012 CARE Annual report for historical information.

Figure 3: Mass Balance Approach to Estimating Gross Collection in 2014



*Total Mass Balance Figures 2014 v2

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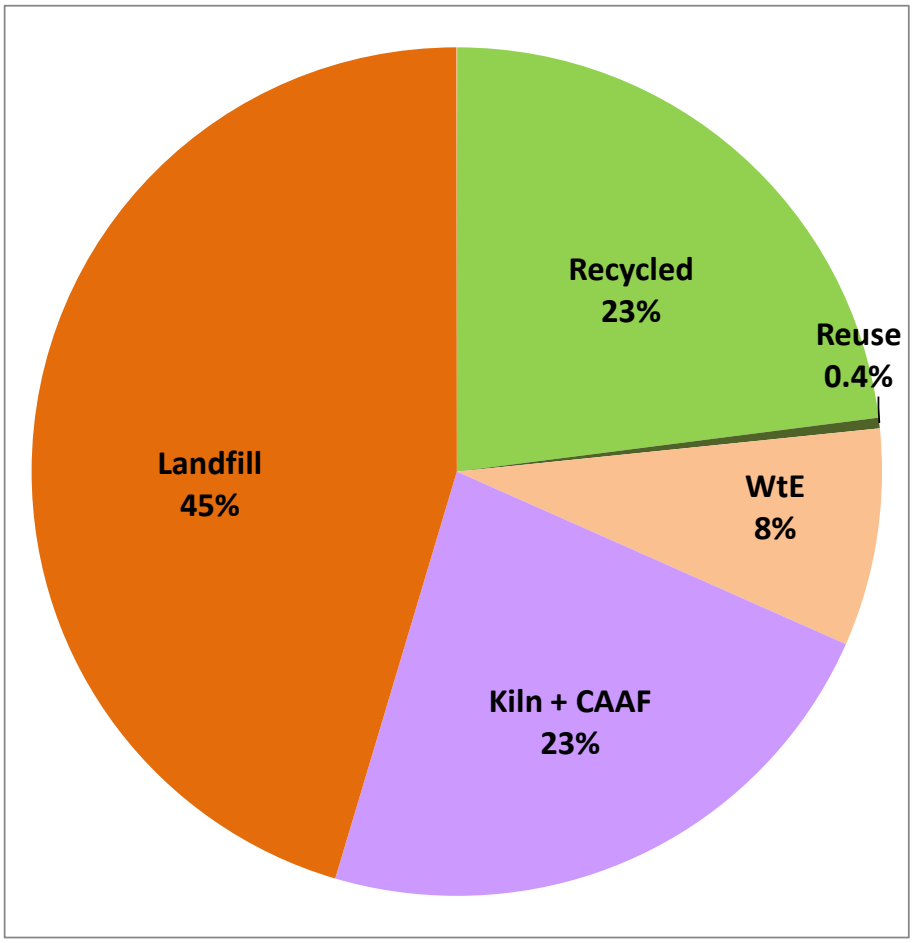
The data in Figure 4 shows that 54% of post-consumer carpet collected in 2014 was sent to processors to be recycled.

Figure 4: Outlets for Post-Consumer Carpet Collected – 2014



Note: Incineration was about. 0.1%.

Companies Handling Post-Consumer Carpet

Survey respondents were asked to characterize the nature of their businesses into one or more of the following categories (which are listed and defined below):

Collection Point – The place where a company collects used carpet from the point of generation and transports it to a sorting, processing or waste management facility.

Collector/Sorting Facility – A facility that separates waste materials (including used carpet) from a mixed waste stream. The end result of this process is used carpet that is separated from other materials.

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Processor – A company or facility that takes used carpet (whether handled by a sorting facility or brought directly by a collector) and processes it for use as a feedstock in a manufacturing facility.

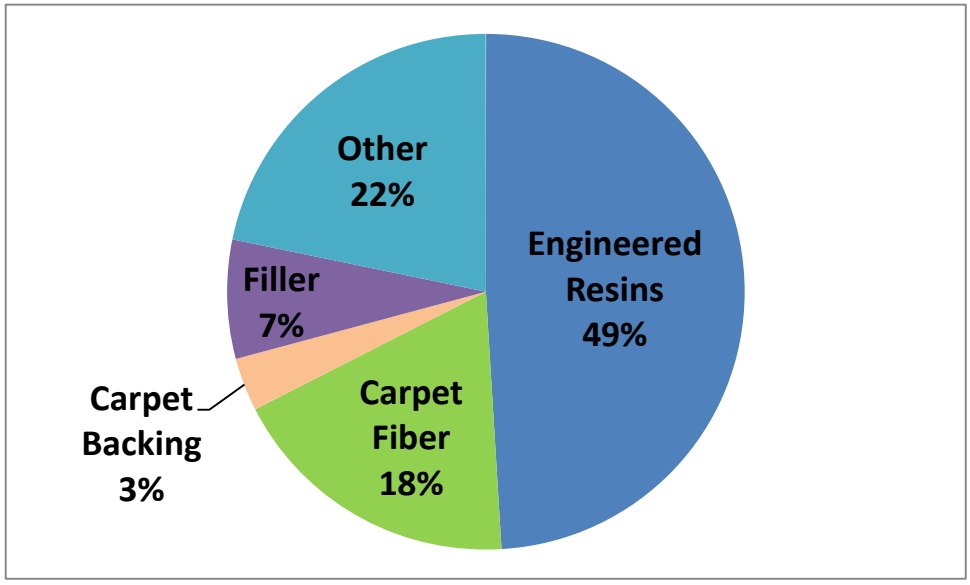
Manufacturer – A company or facility that utilizes processed carpet materials and transforms them into other products, or uses them as raw materials in a manufacturing process.

Engineered Resins: The Most Common End Product Manufactured from Post-Consumer Carpet

Respondents indicated that 49% of the recycled post-consumer carpet is manufactured into engineered resins. There is no change from 2013 and down from 63% in 2012.

21% of the post-consumer recycled carpet pounds went into new carpet (which includes carpet fiber (18%), and carpet backing (3%).

Figure 5: 2014 End Product Markets for Post-Consumer Carpet



U.S. Continues to Be Primary Market for Post-Consumer Carpet Material

In 2014, the US consumed 92% of the post-consumer carpet material collected. The second largest user was China. This is essentially unchanged from 2013.

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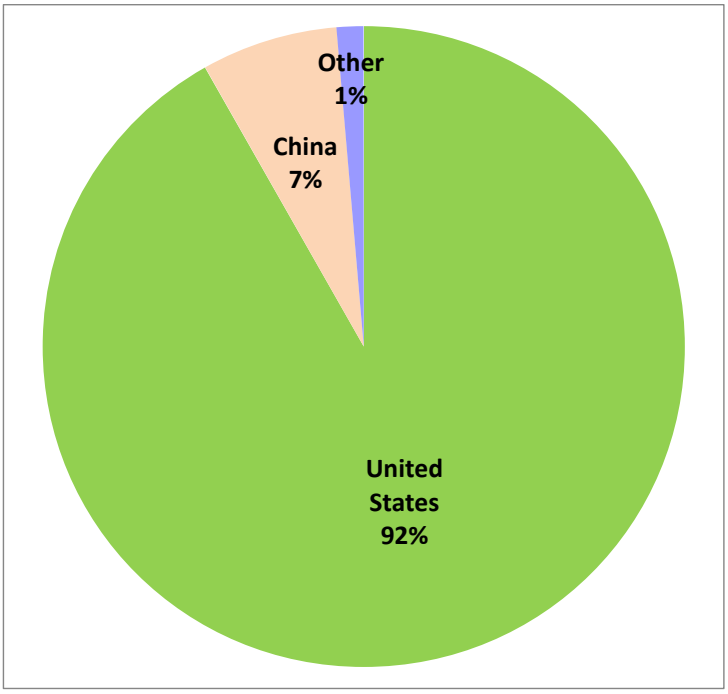
Figure 6: Destination of Post-Consumer Carpet Collected in 2014



Nylon 6 and Nylon 6, 6 Fibers Were 61% of the Fiber Type Sorted in 2014

The CARE survey included information on the types of carpet face fiber collected or sorted by Survey respondents. Each respondent reports the percentage fiber type breakdown. It became obvious that several very large collectors had evolved their collection models to minimize PET in their collection stream. Thus, their ratios skewed the face fiber collection ratio. In 2014 no correction was calculated for this anomaly. Results are reflected in Figure 7.

In 2014, N6 and N66 fibers accounted for 62% (up from 52% in 2013) of the total sorted carpet fiber. The percentage breakdown continues to shift in favor of Nylon 6 (N6) accounting for 38% of the total and Nylon 66 (N66) accounting for 24% (up from 21% in 2013) of the total. Polypropylene (PP) fiber represented 4%, down from 8% in 2013. The percentage of polyester (PET) carpet sold into the market place continues to increase. However, the percentage of PET fiber type reported as collected was 25%. This percentage of PET fiber type has fallen from 34% in 2013. In our survey collectors reported PET percentage ranged from 0-50% in inbound loads. Thus, some collectors continue their effort to only source nylons, while other collectors, who accept unsorted loads, see significantly higher levels of PET fiber.

Changes in the global economic market, beginning in Q4 2014 have resulted in a rapid decline in demand and pricing for nylons.

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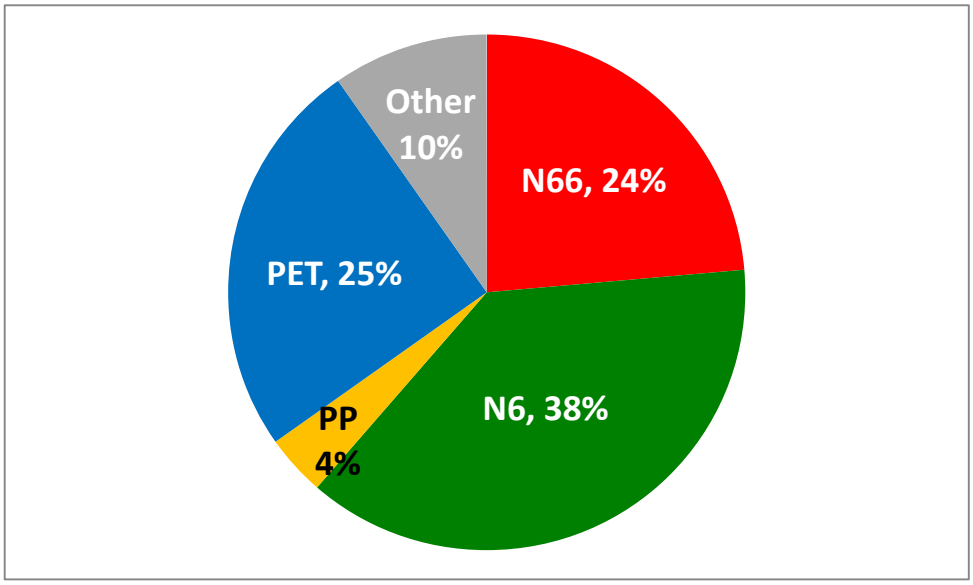
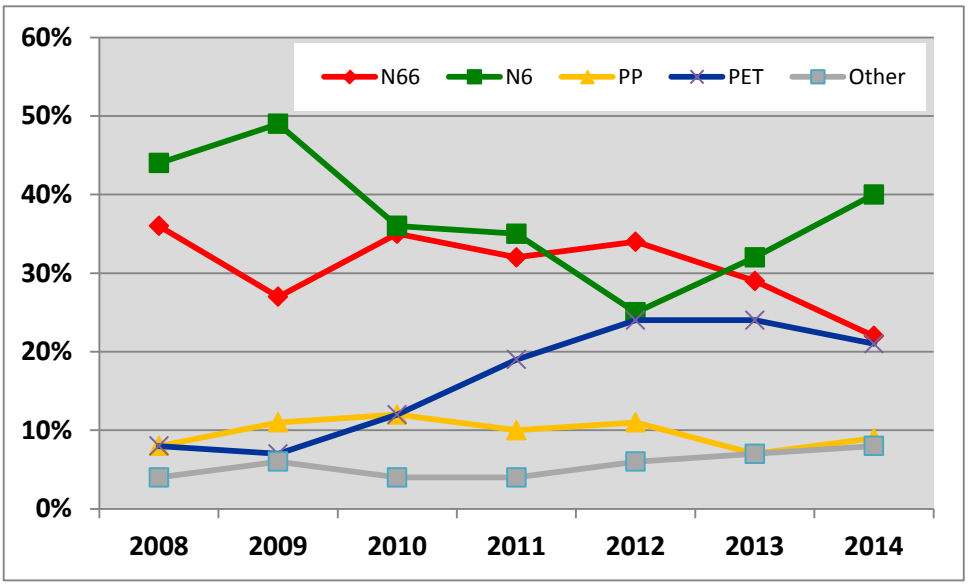
Figure 7: Post-Consumer Carpet Fiber Type, 2014



NOTE: N66=Nylon 6,6; N6=Nylon 6; PP=Polypropylene; PET=Polyethylene terephthalate

For historical perspectives, Figure 8 shows the shift in carpet face fiber from 2008-2014. It should be noted the rapid rise in PET face fiber continues to represent a significant challenge to the recycling of post-consumer carpet because there are currently no high volume viable outlets for PET face fiber. However, the drop in percentage for 2014 reflects the selective efforts to minimize PET collections. This is inconsistent with the actual increasing volume of PET being sold in the marketplace.

Figure 8: Post-Consumer Carpet Fiber Type Collection Trends, 2008-2014



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The trends highlighted in Figure 8 represent a dramatic shift in face fiber distribution over the last 6 years. More importantly, this shift has created great challenges for the recycling community. Currently, there are no significant volume outlets for recycled PET face fiber. Since most collection/sorting models rely on collection and sorting at a central location, all post-consumer carpet is brought back then sorted. The valuable nylon is sold while the non-valuable PET must be sent to landfill or WtE at a cost to the recycler.

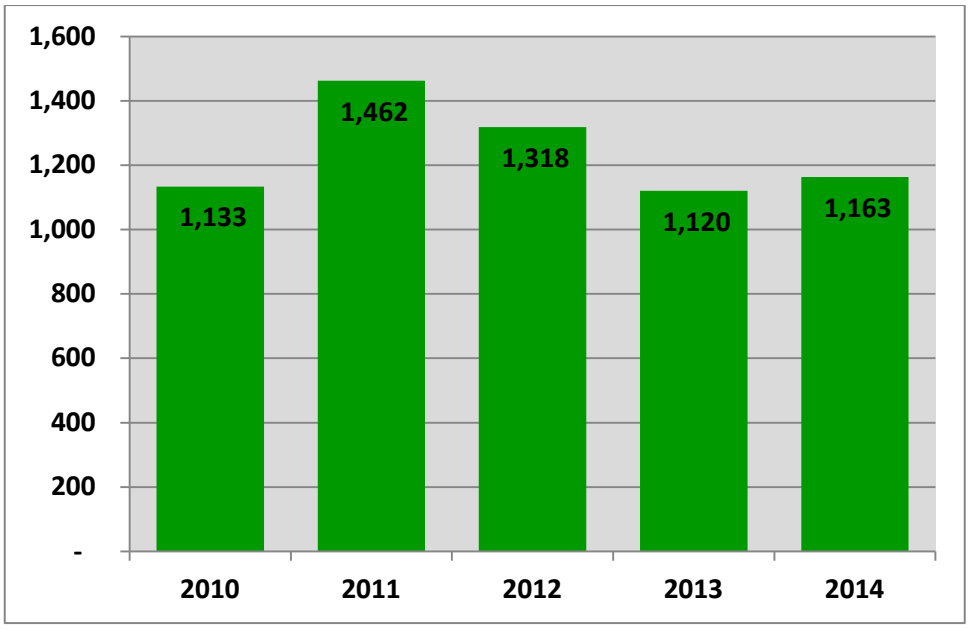
As the percentage of PET rises while that of nylon drops, the collector/sorter is selling less and paying more for disposal. Recent comments by sorters indicate costs have more than tripled in the last couple of years. The trend is alarming for two compelling reasons. The first is the extremely rapid penetration of PET in the marketplace, while the second is the forecast for PET to grow to 50% of all face fiber between 2015 and 2016. CARE continues with the PET Project launched in 2013 to develop products and markets. The economics of recycled post-consumer carpet PET vs. bottle flake make it difficult to invest in the necessary equipment and manpower to process PET into a valuable commodity.

CARE Carpet Recycling Survey Respondents Employed an estimated 1,163 People in Local Communities across the U.S. in 2014

The 44 respondents to the CARE Annual Survey employed 1,163 people in local communities in 2014, an increase of 43 people or 2% versus 2013.

Figure 9: Total Employment by CARE Survey Respondents

Number of Employees



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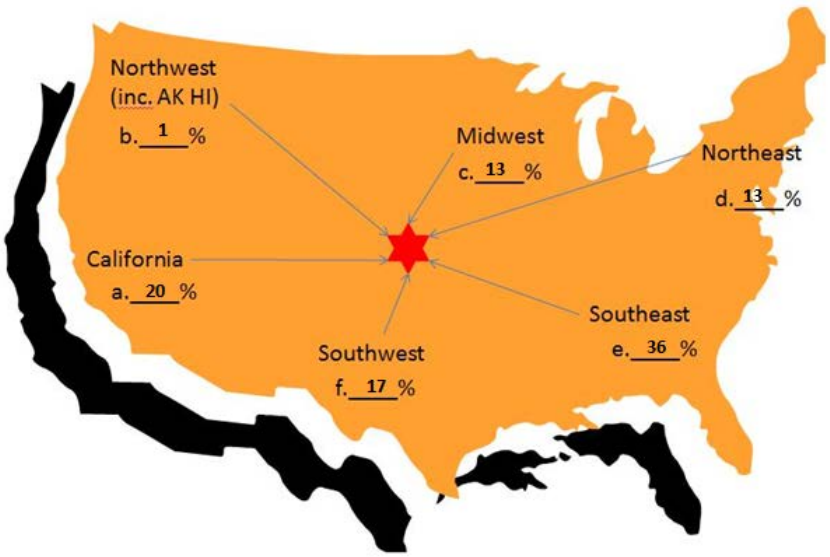
Collection of Carpet is Highest in Southeast, California and Southwest

Figure 10 show where respondents collected carpet, by region.

Figure 10: Reporting Regions in the U.S.

Figure 11 shows that post-consumer carpet collection is highest in the Southeast (36%), followed by California (20%), the Southwest (17%)then the Midwest and Northeast (each 13%). A very small percentage (1%) is reported to be collected in the Northwest. California has the highest collection rate of any single state.

Figure 11: Collection of Carpet by Region, 2014



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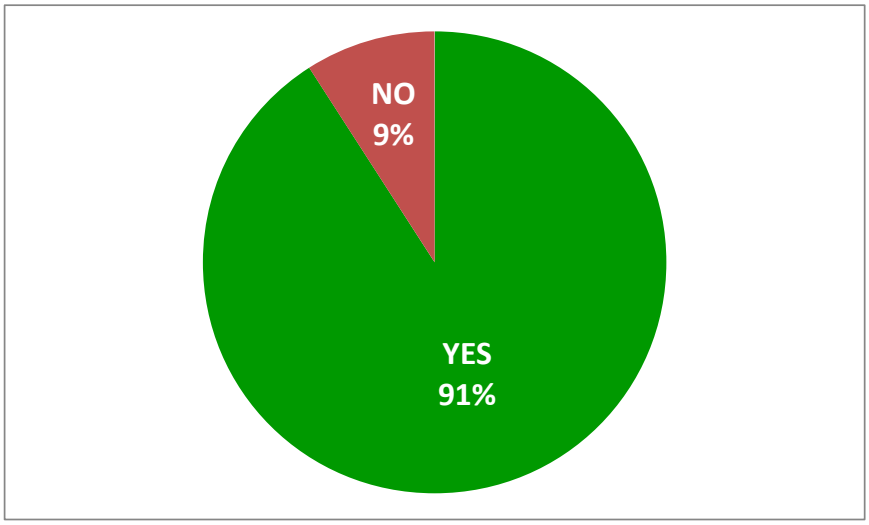
Qualitative Feedback from CARE 2014 Survey Respondents

In the 2014 survey, 91% of respondents (n=44) said CARE was meeting their needs. That is up from 76% in 2013. This is an area that CARE focused on in 2014.

Figure 12: Survey respondents' view of whether CARE is meeting their needs



Summary

- The quality of data reported in 2014 was enhanced via modification of the survey to better inform the mass balance strategy for analysis. In 2014, 44 companies provided some level of quantitative data. No extrapolation of data or use of secondary sources was required although there was extensive dialog with responders for clarification.

- The top 5 collector/sorters represent ca. 50% of all collections into the U.S.

- There is a great deal of diversity in the types of companies reporting post-consumer carpet recycling. This diversity includes geographic, process technology, size (very larger corporations vs. small, entrepreneurial entities and end use markets), business models, etc. As has been true in the past, the largest fraction of recycling is attributed to companies that perform more than a single recycling function: collection, sorting, processing and manufacturing.

- Once again it should be noted that there is a significant level of "close loop recycle" of post-consumer back into carpet. In 2014, while lower than 2013, this outlet represented 21% (face fiber and backing).

- The data shows PET face fiber collection decreased in 2014 and is believed to be a direct result of selectivity by collector/sorters due to a lack of outlets for this material.

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- It is estimated that sales of PET face fiber carpets over the last several years have grown from less than 8% in 2006 to an estimated 40% in 2014.

Survey Methodology

In developing a survey methodology to establish quantitative estimates of recycling of a particular waste stream, two key factors must be taken into account: 1) participation and 2) double-counting. Participation is essential in any surveying process, and even more so in this type of survey, where there is no logical or reliable way to extrapolate results from respondents to the general population. This means that respondents' survey responses will represent the complete and total results. Thus, every effort must be made to maximize participation.

However, with increasing participation comes another potential problem: double-counting. Since a given pound of used carpet may pass through several different entities on its way from the point of generation to its ultimate disposition (reuse, recycling or disposal) and, since all of these different types of entities (collectors, sorting facilities, processors and manufacturers) are included in the survey, the chance exists that the same pound of carpet could be counted more than once. As participation increases, the likelihood of double-counting increases, since there is a greater chance that more than one company may be reporting on their handling of the same material. Redesign and analysis of the survey data are built to help minimize this concern.

A number of features were built into the surveying process to address these two key issues:

Confidentiality of data is often the key to participation, and all aspects of the survey were designed to preserve confidentiality. In particular, once again a web-based surveying tool was used to allow respondents to provide data completely anonymously, if they desired. In addition, all written and verbal communication with potential survey respondents stressed the confidentiality of data.

Simplicity and ease of response was also a key to participation rates. The survey questions were streamlined to the maximum extent possible so that only the most critical data were included, based upon the philosophy that it is much better to have the basic data from many respondents than detailed information from a few (particularly since there is no basis for extrapolation).

Participation rates can also be boosted through the use of multiple means of contact (as well as repeated contacts). Thus, extensive e-mail and telephone communications were used to contact survey respondents. Every effort was made to include new players, as they became known to CARE.

To reduce the chances of double counting, survey respondents were asked to identify the geographic sources of their material to the extent they were known. If there is information from two or more companies that might reflect handling of the same material, the geographic sources of these companies could be reviewed to determine if that was likely.

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In another attempt to reduce the chances for double counting, survey respondents were asked about the type of companies that received the material their company shipped out. This information not only allows for identification of possible double counting, but also serves to provide a more complete picture of the overall flow of post-consumer carpet through the collection and recycling process. In some cases receiving companies are contacted to verify numbers.

With those basic principles in mind, the surveying process was implemented, using the steps outlined below, which are described in general chronological order:

1. The survey used in 2014 was updated based on respondents' feedback from last year in an effort to shorten the survey. The 2014 survey form is shown in Appendix 1.

2. The survey was web-based and posted on the Internet. The survey was accessed by going to a specific URL address that housed the survey, and results were submitted via the Internet, without the need for e-mail or paper-based responses. The results were password protected and available solely to two CARE staff to preserve confidentiality.

3. Based upon past experience with this survey process, the surveying was focused on those companies for which specific individuals have been identified as points of contact.

4. Companies with specific contacts and e-mail addresses were notified via e-mail and were provided the URL so that they could respond electronically. A total of about 197 different companies were sent e-mail notifications of the survey (more than one individual was contacted from an individual firm in several instances). The e-mail notification stressed the confidentiality of the information they were asked to provide.

5. Approximately two weeks after the initial e-mail was sent, follow-up activities were initiated. These included follow-up e-mails to those companies that had not responded, as well as telephone calls to prompt responses and answer questions some potential respondents had raised.

6. All survey responses were reviewed for any inconsistencies or unclear responses. The survey responses were also reviewed to determine if there were any questionable responses (e.g. data that appeared to be off by orders of magnitude with regards to company size). Where there was some question about the responses provided and the respondents had provided their names (respondents can choose to respond entirely anonymously), follow-up was attempted to clarify the responses. In most cases these efforts were successful.

7. Data were transferred to a spreadsheet-based database. This database contains all of the quantitative responses, as well as summaries of any descriptive information provided by the companies.

8. Data to eliminate potential double counting was received and appropriate adjustments made to the data compilations where/when necessary.

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9. The data were compiled and analyzed to produce the results described herein. CARE acknowledges Dr. Matthew Realff for his assistance in the logistics analysis and mass balance calculations.

10. Efforts to maintain consistency year to year are considered important to plot trends and look for patterns.

Assessment of Survey Approach and Results

As noted previously, there are two key factors that led to the conclusion that this year's survey results are high in quality (i.e. believed to be more representative of real-world conditions):

1. Response rate was again very high, meaning that a greater proportion of the total number of companies involved in post-consumer carpet recycling responded by submitting survey results.
2. Manufacturers, who use the material within their own manufacturing process, handled a significant portion of the post-consumer carpet. This eliminated the possibility for double counting of this material.

For these reasons, double counting does not appear to be a significant issue with the data presented in the 2014 CARE Annual Report.

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CARE Outreach Results, 2014

12th Annual CARE Conference

In 2014, members and colleagues of CARE gathered at its 12th Annual Conference, in downtown Seattle in early May. The conference format included a 1.5-day event followed by ½ day for entrepreneurs only. The venue provided for business interactions, including with vendors/exhibitors. CARE also recognized the outstanding individuals and companies who made significant contributions to the CARE organization. The following awards were given:

2014 Recycler of the Year – Tandus Centiva

Tandus Centiva, a Tarkett Company, was selected as CARE's 2014 Recycler of the Year. A CARE partner, Tandus Centiva employs the industry's first closed-loop recycling program through its Dalton-based environmental center. The program, called ReStart, is designed to reclaim and recycle post-consumer flooring, installation waste, product samples and portfolios. To date, Tandus Centiva has reclaimed and recycled more than 268 Million pounds of carpet, LVT and waste.

Russell Bennet of Tandus (left) and CARE Executive Director Bob Peoples

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Fred Williamson Named CARE 2014 Person of the Year

CARE's 2014 Person of the Year, Fred Williamson, is a member of CARE's board of directors and serves as vice president of operations for StarNet Worldwide Commercial Flooring Partnership. Fred boasts more than 40 years of experience in the commercial flooring business, including 13 years in sales management representing carpet manufacturers, 17 years as a commercial flooring contractor, seven years with DuPont and eight years with StarNet Worldwide Commercial Flooring Partnership.

In announcing the award CARE Board Chair Brendan McSheehy stated, "Fred brings the discipline and dedication of a great Marine to everything he does. He serves quietly and efficiently those organizations in which he chooses to invest his time and talent and CARE is a better organization today as a result."

Fred Williamson (center) accepts the CARE Person of the Year Award from CARE Board Member Thomas Holland (right, 2013 winner) and Executive Director Bob Peoples (left)

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"As an organization, CARE has been able to propel carpet recycling initiatives forward because of the work of individuals and companies like Fred Williamson and Tandus Centiva," said Dr. Bob Peoples, executive director of CARE. "This year's winners have helped us approach historical challenges with tangible solutions for our industry."

2014 CARE Entrepreneur Meeting

Due to the development of the VPS Program and launch in January 2015, a separate Entrepreneur meeting was not held this year.

CARE Website Traffic

CARE's website, www.carpetrecovery.org, underwent a major overhaul in 2014. The newly designed website was introduced at the spring annual meeting in May. As a result of the May startup, you will note that stats only begin in July. The following figures provide an overview of our website activity for the second half of 2014.

Figure 13: About CARE Webpage Visits, 2014

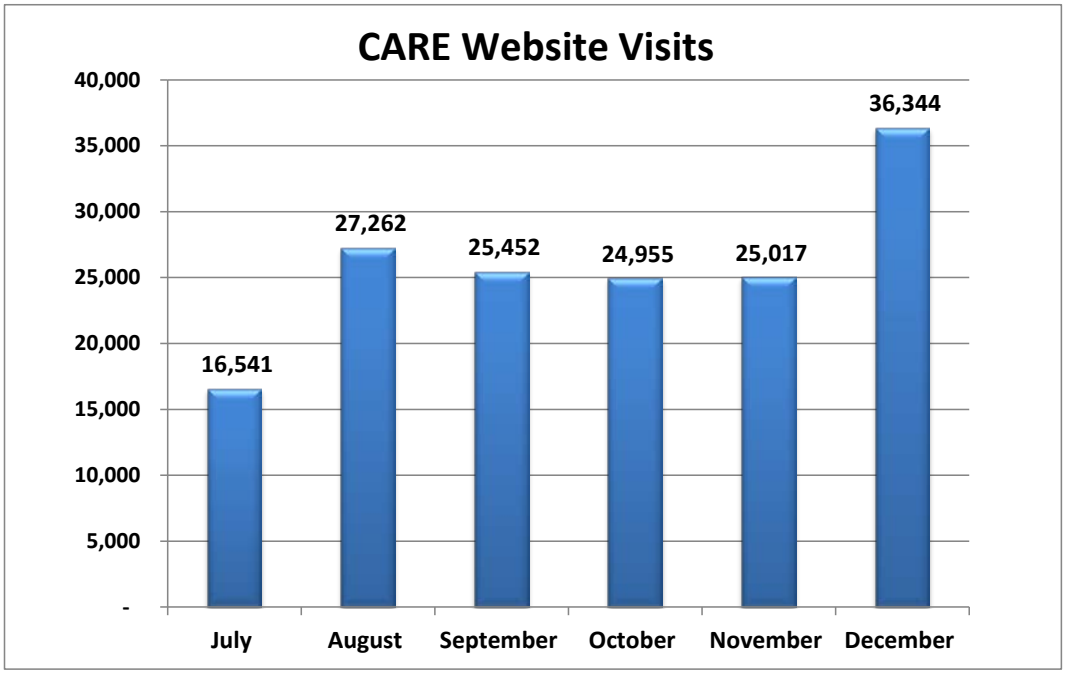

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Figure 14: CARE Homepage Visits, 2014

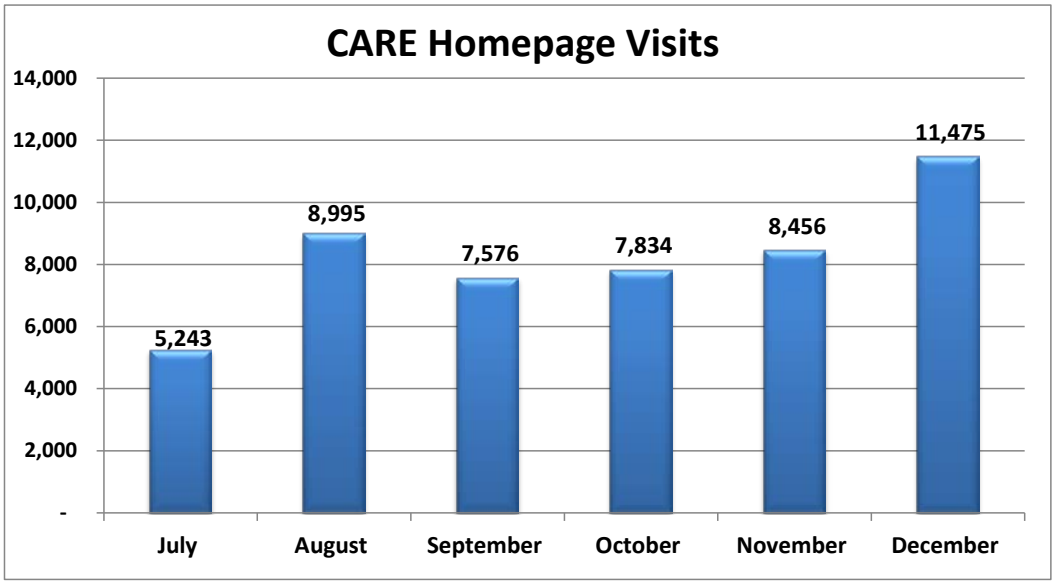

Figure 15: CARE Map Webpage Visits, 2014

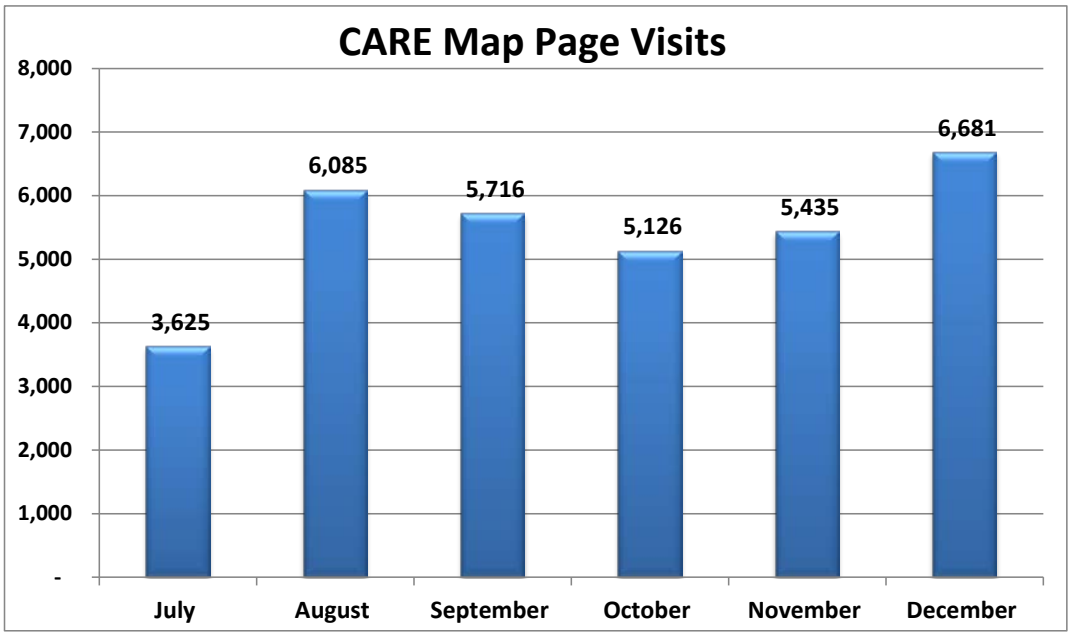

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Figure 16: CARE AB 2398 Webpage Visits, 2014

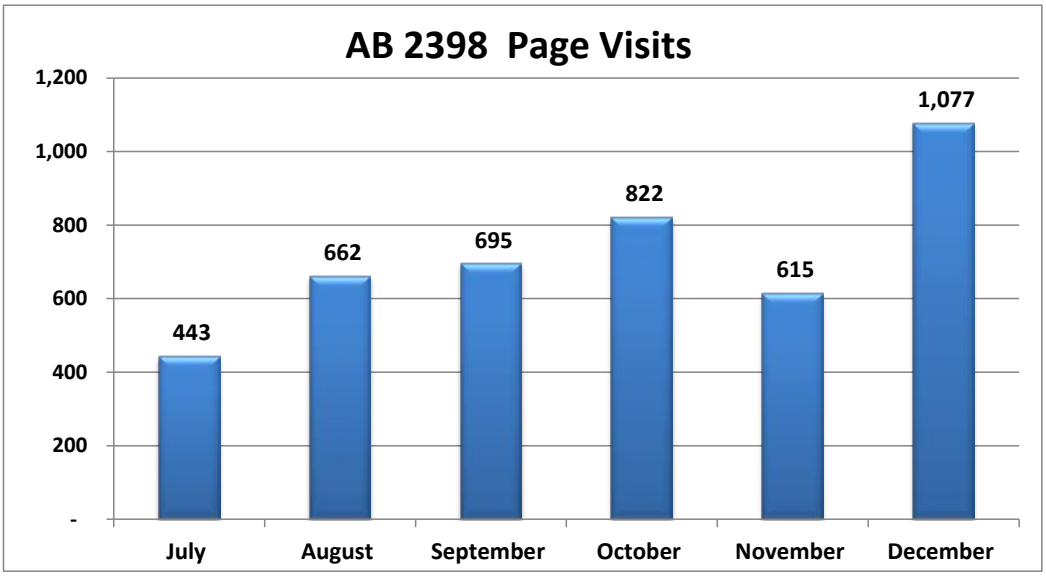
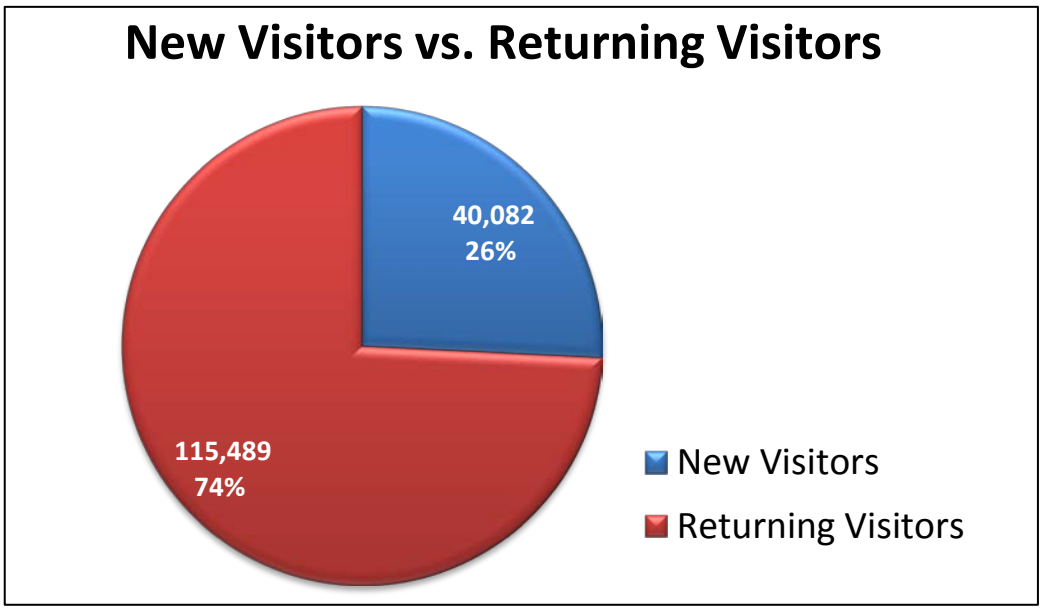


Figure 17: New vs. Returning Webpage Visitors, 2014



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Appendix 1

Carpet America Recover Effort (CARE) Survey 2014

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2014 CARE Annual Survey

Exit this survey

1.

Dear CARE Carpet Reclamation and Recycling Partner,

Thank you for taking the time to complete the 2015 Carpet America Recovery Effort (CARE) Annual Survey. Your complete answers to this survey will allow us to perform quantitative analysis on the carpet recycling stream and create a detailed Annual Report for the stakeholders of CARE.

Please report only the quantity of post-consumer carpet managed through your business. For purposes of the CARE Annual Report, we will NOT include information on post-industrial carpet, ONLY POST-CONSUMER CARPET.

The survey should take less than 20 minutes to complete. To minimize the amount of time spent on completing the survey, we recommend that you read through the survey and have your data available before completing the survey.

If you need any assistance or have questions while completing this survey, please contact Anthony Cline, CARE's Operations Director, at acline@carpetrecovery.org or 706-428-2127.

Due to the time sensitive nature of this survey, please complete survey by close of business on **Friday, February 27, 2015.**

Note - All Company information and answers to this survey will be CONFIDENTIAL, and will only be seen and used by CARE's Executive Director and Operations Director.

All data collected will be reported in the aggregate, thus removing any references to individual companies.

Thank you

Bob Peoples

Executive Director, Carpet America Recovery Effort (CARE)

*** Of your total employees, how many are specifically associated with the diversion/recycling of post-consumer carpet?**

*****

Please select the type of company from the list below, based upon the descriptions provided. If your company performs more than one function, check all boxes that apply.

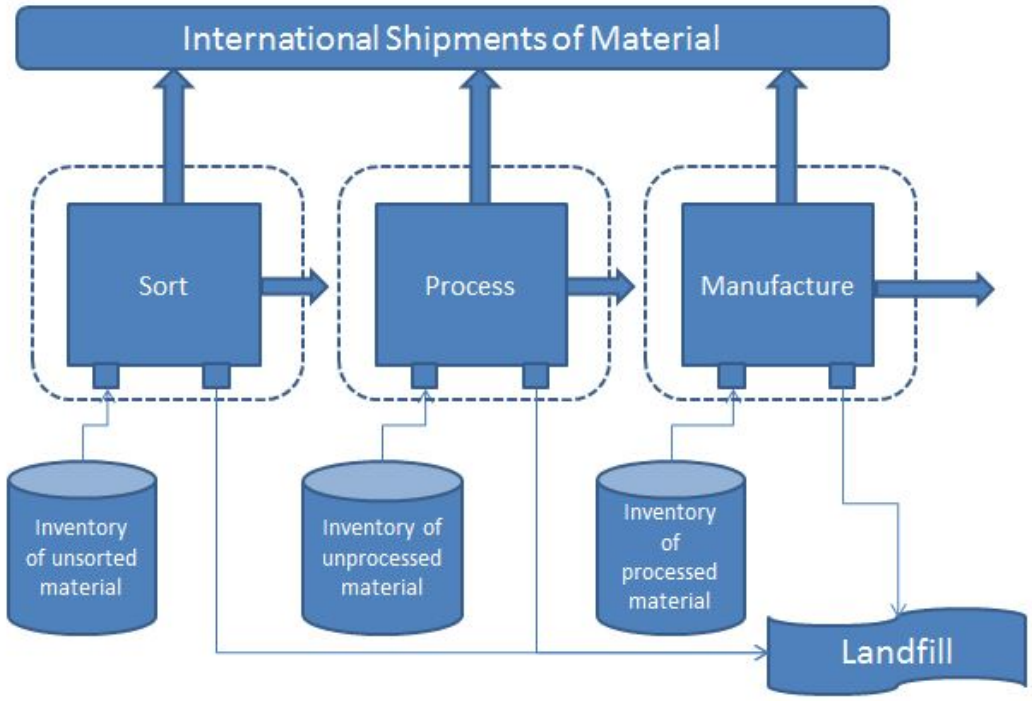
Collector - A company that consolidates and temporarily stores recovered commercial and/or residential carpet.

Sorting Facility – A facility that segregates collected carpet into the various backing types (PVC, SBR Latex, etc.) and/or fiber types (e.g., Nylon 6, Nylon 6.6, Polypropylene and Polyester).

Processor - A company or facility that receives post-consumer carpeting (whether handled by a sorting facility or brought directly by a collector) and processes it for use as a feedstock in a manufacturing facility.

Manufacturer - A company or facility that utilizes processed carpeting materials and transforms them into other products, or uses them as raw materials in a manufacturing process.

Included is a flow chart that represents the various stages of the carpet recycling process. This will be used throughout the survey.



Definitions

Carpet as Alternative Fuel (CAAF): Fuel that has been produced from source-separated carpet and processed, including (1) extraction of components if at all possible; (2) size reduction, shredding, and/or blending with coal fines, ect.

Cement Kiln: Cement production facility that may use CAAF as a source of energy and/or as an additives for cement production.

Incineration: Complete burning of material to ashes, with no energy recovery

Landfilling: Landfilling includes the placement of post-consumer carpet and/or the residuals from a post-consumer carpet management method into a landfill disposal facility.

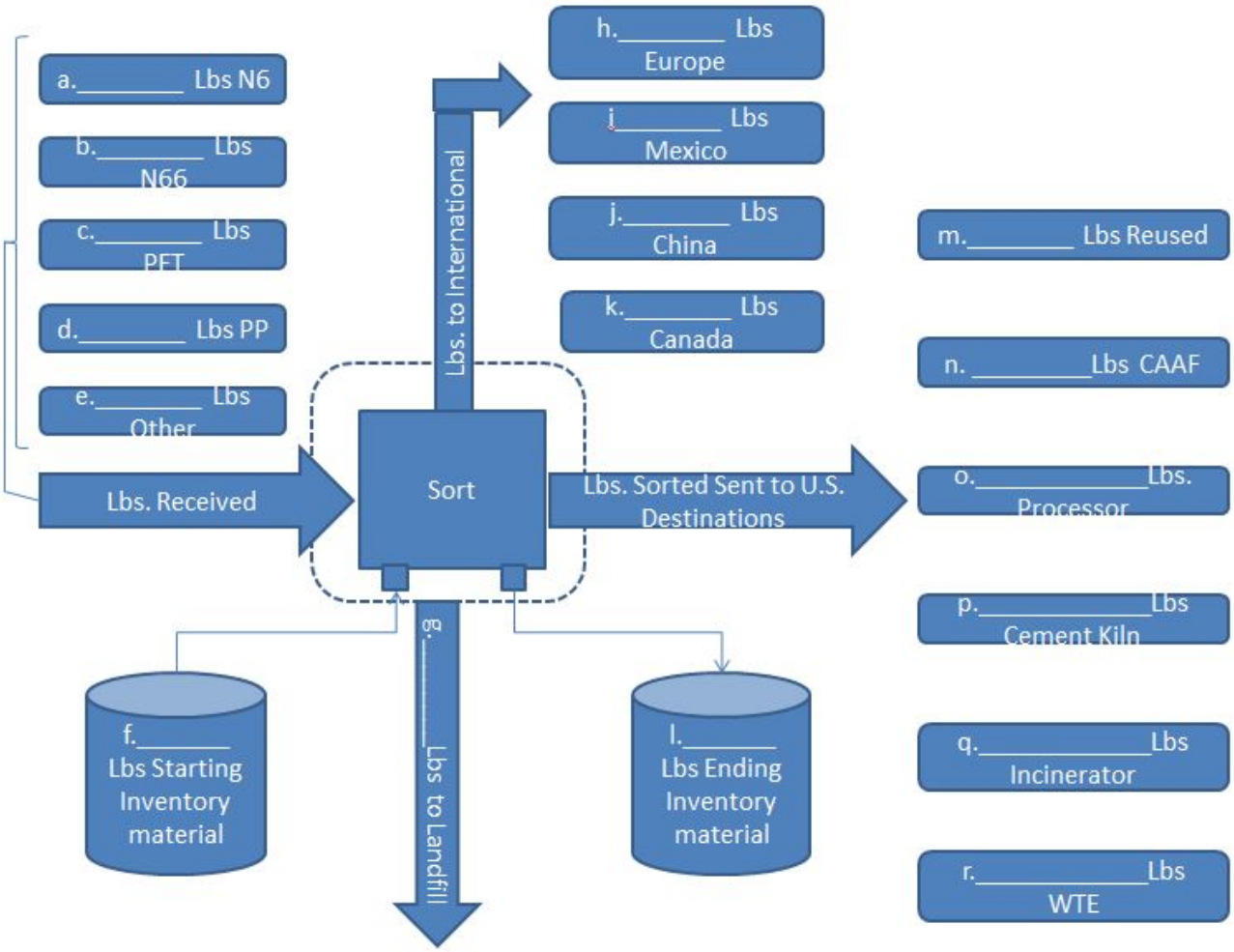
Reuse: Refurbishing and donating/selling recovered carpet back into the market for its original intended use. The reuse of recovered carpet retains the original purpose and performance characteristics of the carpet.

Waste-to-Energy: Process of recovering thermal energy from MSW through combustion.

Example: A recycling business person collects 1 million lbs of carpet. The recycler sorts and shears this material and sends it to a processor. Along the way, some of the post-consumer carpet is reused, and some is not able to be recycled, for various reasons, and is either sent to a CAAF or a cement kiln facility, waste-to-energy, or the landfill. The recycler tracks the amount of material as it progresses through the process. For this example, the recycler would answer the next questions as follows:

Sorter Flow Chart

Refer to the diagram listed below.



Please use the diagram above.

Example:

a. - pounds of N6
b. - pounds of N66

Please include data below.

a. Pounds of N6	
b.Pounds of N66	
c.Pounds of PET	
d.Pounds of PP	
e.Pounds of Other	
f,Pounds of Starting Inventory Material	
g.Pounds to Landfill	
h.Pounds to Europe	
i.Pounds to Mexico	
j.Pounds to China	
k.Pounds to Canada	

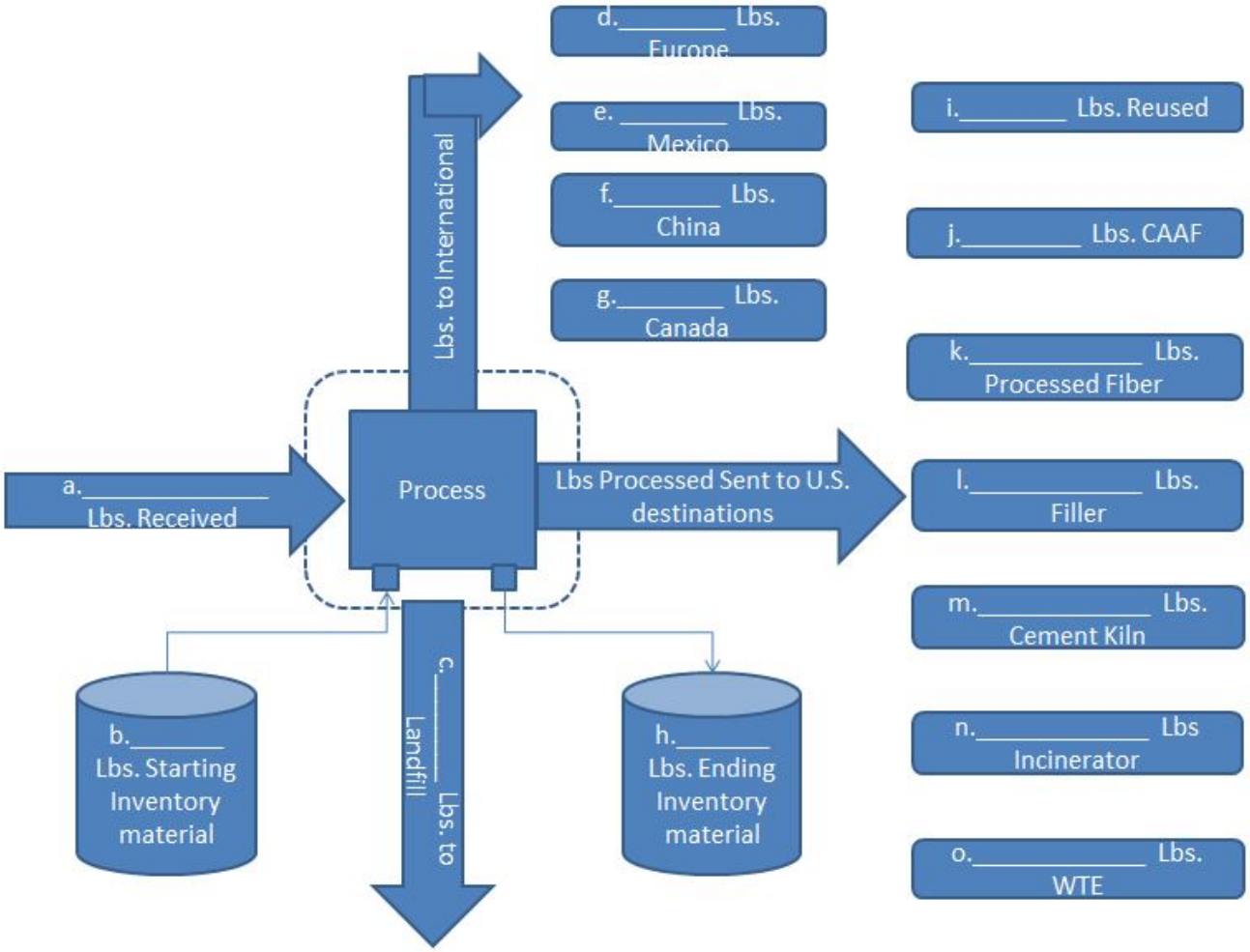
l.Pounds of Ending Inventory	
m. Pounds Reused	
n.Pounds to CAAF	
o.Pounds to Processor	
p.Pounds to Cement Kiln	
q.Pounds to Incinerator	
r.Pounds to WTE	

For the sorting facility, indicate the percentage of post-consumer carpet that you handle by fiber type:

Note - Total must equal 100%

N66	
N6	
PP	
PET	
Other	

Processor Flow Chart



Please use the Processor Flow Chart to answer this question.

Example:

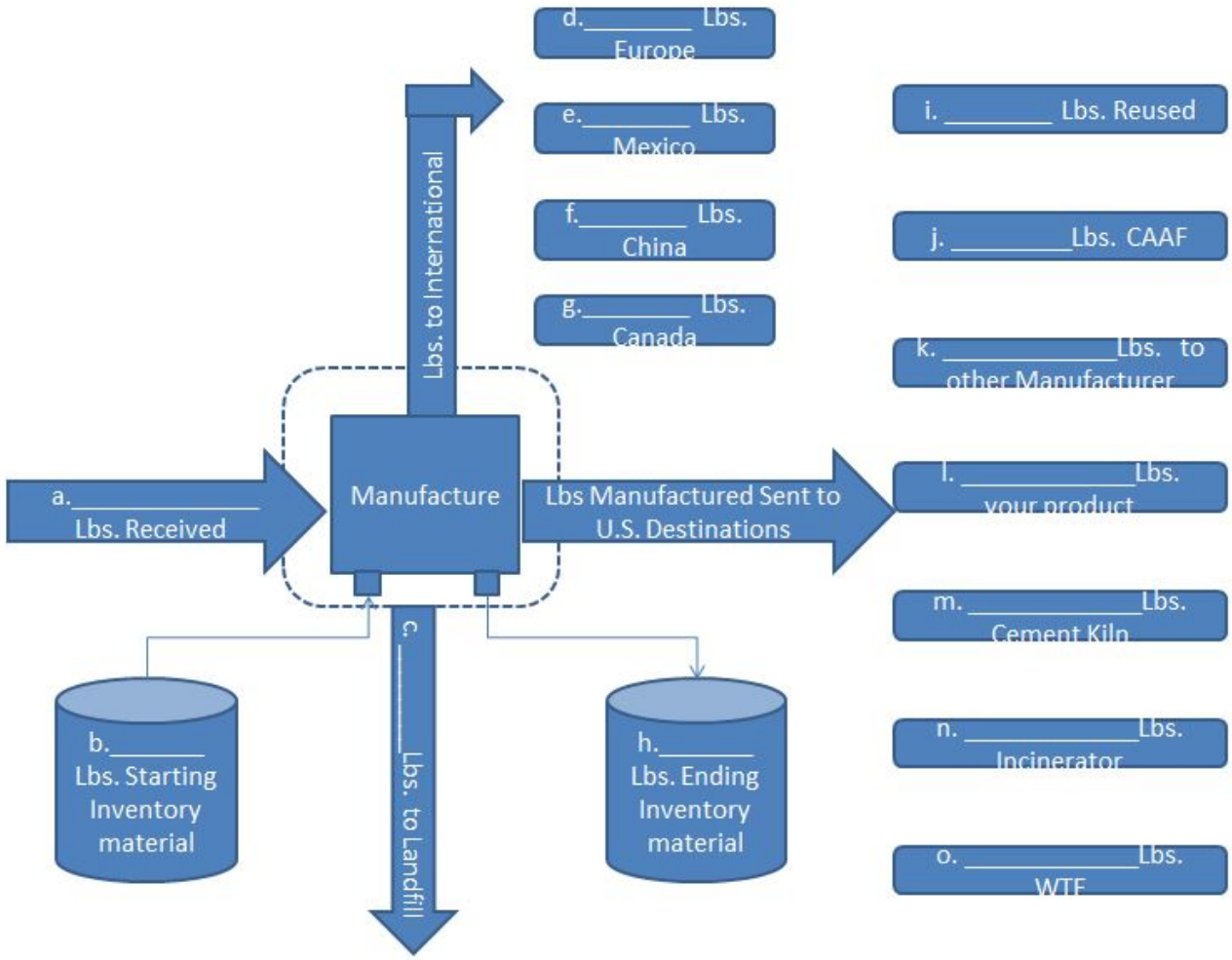
a. - Lbs. received from sorter
b. - Lbs of starting inventory material

a.Pounds received from sorter	
b.Pounds of Starting Inventory	
c.Pounds to Landfill	
d.Pounds to Europe	
e.Pounds to Mexico	
f.Pounds to China	
g.Pounds to Canada	
h.Pounds of Ending Inventory	
i.Pounds Reused	
j.Pounds to CAAF	
k.Pounds of Processed Fiber	

l.Pounds of Filler	
m.Pounds to Cement Kiln	
n.Pounds to Incinerator	
o.Pounds to WTE	

How are you handling the PET carpet you recieve (outlets or landfill)?

Manufacturer Flow Chart



Please use the Manufacturer Flow Chart for this question.

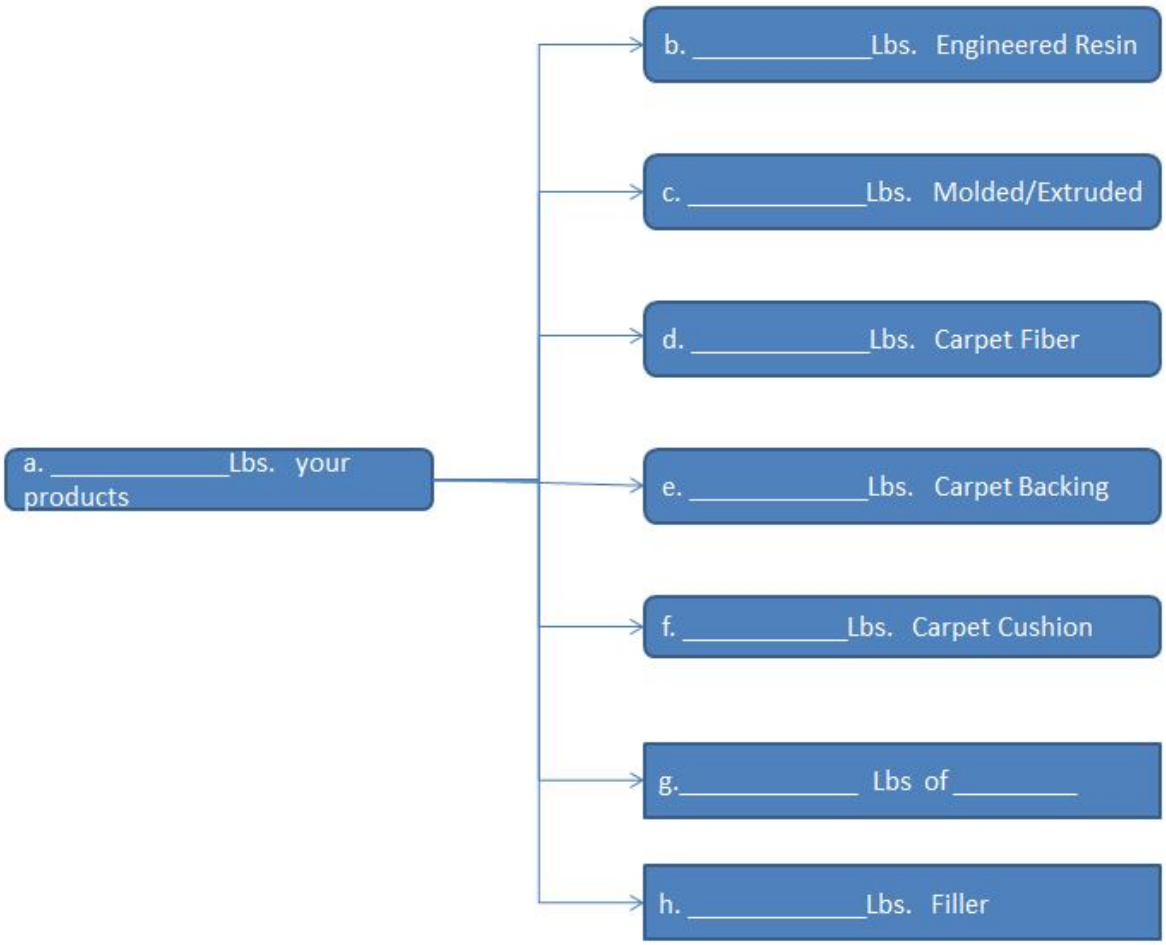
Example:

a. - Lbs. received from processor
b. - Lbs. of starting inventory material

a.Pounds Received from Processor	
b.Pounds of Starting	

Inventory	
c.Pounds to Landfill	
d.Pounds to Europe	
e.Pounds to Mexico	
f.Pounds to China	
g.Pounds to Canada	
h.Pounds of Ending Inventory	
i.Pounds Reused	
j.Pounds to CAAF	
k.Pounds Sent to Other Manufacturer	
l.Pounds Used by Your Product	
m.Pounds to Cement Kilns	
n.Pounds to Incinerator	
o.Pounds to WTE	

Manufactured Products Output



This question is inquiring about the products that are manufactured using post-consumer carpet. The first blank, "a", asks for the total lbs. of material that are included in manufactured products. The entries on the right-hand side are requesting the specific numbers on the type of product was manufactured with the material.

a.Pounds of Material Used Overall	
b.Pounds to Engineered Resin	
c.Pounds Molded/Extruded	
d.Pounds for Carpet Fiber	
e.Pounds for Carpet Backing	
f. Pounds for Carpet Cushion	
g.Miscellaneous	
h.Pounds for Filler	

US Regional Map

To the extent known, identify what percent of the material received came from each geographic area:

Note - Totals must equal 100%

a.California	
b.Northwest	
c.Midwest	
d.Northeast	
e.Southeast	
f.Southwest	

To the extent known, please indicate the percentage of the output from your facility that is sent to customers in the U.S. versus customers overseas. Answers should total to 100%.

US	
Mexico	
Canada	
Europe	
Asia	
Other/Unknown	

Overall, is CARE meeting your and your business's needs?

Yes

No

If you answered no to the previous question, please specify where CARE can provide more support for your business.

I affirm that the answers provided in this survey are accurate and complete to the best of my knowledge.

Print Name:

***Company and Contact Information**

Name:	
Company:	
Address:	
Address 2:	
City/Town:	
State:	-- select state --
ZIP:	
Country:	
Email Address:	
Phone Number:	

Done

Appendix 2

Definitions Used in the CARE 2014 Annual Report

Carpet: A manufactured article that is used in commercial or residential flooring applications as a decorative or functional feature and that is primarily constructed of a top visible surface of synthetic or natural face fibers or yarns or tufts attached to a backing system derived from synthetic or natural materials. "Carpet" includes, but is not limited to, a commercial or a residential broadloom carpet or modular carpet tiles. "Carpet" does not include a rug, pad, cushion, or underlayment used in conjunction with, or separately from, a carpet.

Carpet as Alternative Fuel (CAAF): Fuel that has been produced from source-separated, and sorted post-consumer carpet and processed, including (1) extraction of component for recycling if at all possible; and (2) size reduction, shredding, and/or blending with coal fines, etc.

Carpet America Recovery Effort (CARE): A nationwide, 501(c) (3) non-profit organization whose focus is on post-consumer carpet stewardship.

Carpet Industry: The universe of participants involved in the production of carpet, including carpet manufacturers, fiber manufacturers, material suppliers, etc. It includes, and is not limited to members of the Carpet and Rug Institute (CRI).

Cement Kiln: Cement production facility that may use CAAF as a source of energy and/or as an additive for cement production.

Collection: Any method of consolidating and temporarily storing recovered commercial and/or residential carpet.

Disposal Diversion: Carpet removed from the waste stream that was destined for the landfill or incineration, for the purpose of reuse, recycling, CAAF or waste-to-energy (WtE).

Disposal Facility: Facilities that are licensed and permitted to provide final disposal for the specific wastes they accept, including waste-to-energy, incineration, and landfilling.

Entrepreneur: Individual or privately-held company who is not a carpet manufacturer, and who actively, collects, sorts, processes or manufactures products made from post-consumer carpet.

Filler: Materials such as calcium carbonate, etc. used in the production of carpet backing.

Higher Value Recycling Material: Output of the materials with the most benefits to manufacturers of finished products. Examples of higher value recycling materials include post-consumer carpet fiber, post-consumer carpet backing, engineered resins and material for carpet cushion.

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Incineration: Complete burning of material to ashes, with no energy recovery, to reduce waste volume.

Input: The post-consumer carpet that is collected, sorted and readied for processing.

Landfilling: Landfilling includes the placement of post-consumer carpet and/or the residuals from a post-consumer carpet management method into a landfill disposal facility.

Lower Value Recycling Material: Output of the materials with benefit to manufacturers of finished products, but a lower value than higher value recycling materials. Examples of lower value recycling materials include carpet filler and non-functional filler.

Memorandum of Understanding (MOU) for Carpet Stewardship: An agreement entered into by multi-stakeholders, including carpet industry, entrepreneurs, government entities and non-governmental organizations.

Output: The material that results from the processing (shredding, shearing, hammer milling) of post-consumer carpet from the processor. Examples of output are: fiber, shredded carpet tile, depolymerized chemical components, and carpet filler.

Recycled Content: Also known as recovered material content, the percentage of material, by weight, a product is made from that has been recovered from consumers in the municipal solid waste stream (post-consumer content) plus any industrial materials salvaged for reuse (pre-consumer/post-industrial content).

Post-Consumer Recycled Carpet Content: The amount or percent of carpet, by weight, that is no longer used for or has served its manufactured purpose, that is incorporated into the manufacturing process of the same or a different product.

Post-Industrial/Pre-Consumer Recycled Carpet Content: The amount or percent of carpet material, by weight, generated by manufacturers or product converters, such as trimming, overruns, and products returned to the mills, that are incorporated back into the manufacturing process of the same or a different product.

Post-Consumer Carpet Materials: Carpet that has completed its life cycle as a consumer item or is no longer used for its manufactured purpose.

Post-Industrial/Pre-Consumer Carpet Material: Carpet materials generated in manufacturing and conversion processes, including, but not limited to manufacturing scrap and trimmings/cuttings.

Processing: Preparing carpet material for reuse, recycling, CAAF, WTE, or disposal.

Recycling: Transforming or remanufacturing discarded carpet materials into usable or marketable materials, rather than for landfill disposal, incineration, WTE, CAAF, or reuse.

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Reuse: Refurbishing and donating/selling recovered carpet back into the market for its original intended use. The reuse of recovered carpet retains the original purpose and performance characteristics of the carpet.

Rug: A loose laid (not installed or attached at wall base) soft floor covering manufactured from natural or synthetic fiber, including carpet cut into room or area dimensions that is not intended to cover the entire floor.

Sorting: The method used for segregating collected carpet into the various backing types (PVC, SBR Latex, etc.) and/or fiber types (e.g., Nylon 6, Nylon 6.6, Polypropylene and Polyester)

Source Reduction: The result of using less product or material in manufacturing and use of carpet, and/or reducing the amount of discarded carpet generated.

Source Separation: The process by which carpet is separated/segregated from all other materials at the end of its useful life (or when discarded).

Waste-to-Energy: Process of recovering thermal energy from solid waste through combustion.

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Appendix 3

CARE Board of Directors, 2014

Brendan McSheehy, Jr. – Board Chair, Universal Fiber Systems LLC
Russ Delozier – J&J Flooring Group
Don Dolan – Masland Contract
Joe Foye – Mohawk Industries, Inc.
Sheri Gorman – RD Weis
Ron Greitzer – LA Fiber Company and Reliance Carpet Cushion
Thomas Holland – Secretary, Texas Carpet and Construction Recycling
Lynn Preston – Tandus Centiva
Dick Kruse – Kruse Carpet Recycling
Philip Ivey- Milliken
Jim Lindsey – Aquafil, Inc.
Paul Murray – Treasurer, Shaw Industries Group, Inc.
Eric Nelson – Interface
Glenn Odom – Wellman Plastics Recycling
Robert Peoples – Executive Director, CARE
Sean Ragiel – CarpetCycle
Nicole Villamizer – Environmental Protection Agency
Fred Williamson – StarNet Worldwide Commercial Flooring Partnership
Joe Yarbrough – The Carpet and Rug Institute

CARE Board Advisors

Paul Ashman, Carpetrecycling.com
Frank Endrenyi, Sustainable Solutions
Matthew Ewadinger, North Carolina Department of Environmental and Natural Resources
Dennis Hayford, Polymers Center of Excellence
Bob Pilotti, EMC Plastics
Dr. Matthew Realff, Georgia Institute of Technology

About CARE

Established in 2002, CARE is a 501 (C) 3 non-profit organization. Carpet America Recovery Effort (CARE) is a joint industry-government effort to increase the amount of recycling and reuse of post-consumer carpet and reduce the amount of waste carpet going to landfills. www.carpetrecovery.org

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