



CARE California Carpet Stewardship Program

2019 Annual Report



An initiative of CARE:
Carpet America Recovery Effort

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1 Contact Information

California Code of Regulations (CCR) Section 18944(a)(1). Contact information. Identify the manufacturer or stewardship organization responsible for the annual report submittal.

Carpet America Recovery Effort (CARE) serves as the legislatively designated California Carpet Stewardship Organization (CSO) responsible for annual report submittal under the California Carpet Stewardship Program (Program). CARE is responsible for implementing the Program in compliance with Carpet Stewardship Law and the approved Stewardship Plan, with regulatory oversight by CalRecycle.

California's Carpet Stewardship Law includes Assembly Bill 2398 passed in 2010 and amended by AB 1158 in 2017, AB 729 in 2019, and their associated regulations, as codified in Section 18944 of the California Code of Regulations (CCR). This annual report covers the Program's efforts with regard to its approved California Carpet Stewardship Plan 2018–2022, including modifications in a new "Chapter 0," which CalRecycle approved in February 2019. The 2019 Annual Report will track the Program's progress with regard to the updated Plan approved in 2019.

Carpet America Recovery Effort (CARE) is a 501(c)(3) organization that began in 2002 as a result of a Memorandum of Understanding (MOU) for Carpet Stewardship signed by stakeholders, including members of the carpet industry, government representatives, nongovernmental organizations (NGOs), and entrepreneurs. The mission of CARE is to advance market-based solutions that increase landfill diversion and recycling of post-consumer carpet, encourage design for recyclability by carpet manufacturers, and support manufacturers in use of recycled materials in secondary products.

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The CARE California Program is open to all carpet mills that make, sell, or distribute carpet products and to distributors that import carpet into California. All carpet manufacturers that ship or sell carpet in California must be covered under an approved Carpet Stewardship Plan. Appendix 10.5 includes a current list of participating carpet mills with their contact information. This list is updated quarterly; see the CalRecycle website for the current [**Compliant Manufacturers List**](#).

2 Executive Summary

CCR Section 18944(a)(2). Executive Summary. Provide an evaluation of the effectiveness of the carpet stewardship plan, and anticipated steps, if needed, to improve performance.

2.1 Introduction and Program Goals

At the end of 2019, the California Carpet Stewardship Program (Program) completed 8.5 years of operation. With the adoption of AB 1158 and AB 729, adopted into law in October 2017 and 2019 respectively, several changes have been incorporated into the Carpet Stewardship Law originally established via AB 2398. AB 729 went into effect January 1, 2020 and is therefore not a major factor in this report.

This annual report presents the Program's progress with regard to the following 8 Performance Goals stated in the 2018–2022 Plan, and which responds to the requirements embodied in AB 2398, AB 1158, and AB 729—collectively known as Carpet Stewardship Law:

- 1) Increase the recyclability of carpet.
- 2) Expand and incentivize markets for products made from post-consumer carpet.
- 3) Increase the reuse of post-consumer carpet.
- 4) Increase the weight of post-consumer carpet that is recycled.
- 5) Reduce the disposal of post-consumer carpet.
- 6) Increase the collection convenience for the recycling of post-consumer carpet and increase the collection of post-consumer carpet for recycling.
- 7) Increase processor capacity, including processor capacity in California.
- 8) Achieve a 24-percent recycling rate for post-consumer carpet by January 1, 2020, and any other recycling rate established by the Department pursuant to Section 42972.2.

As well as ensure incorporation of the following:

- Provide incentives or grants to state-approved apprenticeship programs for training apprentice and journey-level carpet installers in proper carpet recycling practices.
- Grants and subsidies should be structured to incentivize Highest Recyclability.

- Ensure that assessment fee funds shall not be expended on penalties or litigation against the state.
- Ensure that subsidies for Carpet As Alternative Fuel (CAAF) and Kiln are discontinued.

Finally, based upon CalRecycle’s Conditional Approval of CARE’s 2018–2022 Plan, CARE was directed by CalRecycle to create a “Chapter 0” to add at the beginning of the Plan to explicitly address all conditions outlined in CalRecycle’s October 16, 2018, Request for Approval (RFA) document. Below are overview highlights of the key items addressed, each of which are presented with detailed results in Chapter 3.

- I. Include commitments to accomplish all of the following and describe how it will fulfill these commitments by 9/1/2019:
 - a. Conduct and provide to CalRecycle an independent, detailed economic analysis to validate the Subsidy Justification and Conversion Cost Models that justifies the assessment based on the actual costs of program participants.
 - b. Update the Subsidy Justification Model (SJM) and the Cost Conversion Model (CCM) by 9/1/2019 and every six months thereafter.
 - c. Demonstrate CARE’s SJM and CCM use California-specific data and account for regional cost differences.
- II. With respect to convenience, CARE must include its commitments to accomplish all of the following and describe how it will fulfill these commitments by 9/1/2019:
 - a. Submit modifications to convenience goals that are consistent with the results of the Convenience Study to CalRecycle,
 - b. Complete audits of participating collectors/sorters to ensure compliance with the revised AUPs that support convenient collection.
- III. With respect to incentivizing markets for products made from post-consumer carpet, CARE must include its commitment to accomplish the following and describe how it will fulfill this commitment by 9/1/2019:
 - a. Establish a minimum weight of post-consumer carpet content a product must contain, on an annual basis, to be considered as a product made from post-consumer carpet.
- IV. With respect to source reduction, CARE must include its commitment to accomplish the following and describe how it will fulfill this commitment by 9/1/2019:

- a. Develop AUPs for reuse. The AUPs must describe the documentation, processes, and procedures that must be kept and followed by reuse incentive recipients. Those AUPs should also ensure that expansion of the reuse market is not adversely impacted by reused carpet not meeting the performance expectations.
- V. CARE must also complete and include all of the following:
- a. Expanded and implementable collection procedures in CARE's AUPs for Collector/Sorters to support Program convenience, including but not limited to, requirements that all carpet types must be accepted, and carpet is transported to a processor participating in CARE's Program and not directly to landfill;
 - b. A proposed timeline for auditing Collector/Sorters to ensure compliance with the revised AUPs; and
 - c. Clarifications and corrections to the revised Plan as specified.

2.2 Global Recycling Markets and Oil Prices

Similar to impacts on plastics related to curbside recycling collection programs, external market conditions including but not limited to the price of oil (the primary driver of virgin material pricing for carpet fiber) and a constrained export market—particularly due to China's National Sword policies and tariffs—equally impact carpet recycling markets. Given that 99% of carpet products are made from various plastic polymer-based fibers – primarily Polyethylene Terephthalate (PET), Nylon, Polypropylene (PP) and mixed fibers – which are all derived from oil, it is understood that the price of oil for virgin material products directly relates to industry-delineated hierarchical commodity pricing for post-industrial plastics, post-consumer plastic products and finally post-consumer carpet fibers.

Despite challenges presented through external markets and oil pricing, throughout 2019, the California Carpet Stewardship Program continued to demonstrate a reliable and solidly consistent upward progression trend toward achievement of Program goals. Figure 2-1 below shows generally declining prices for crude oil since 2012.

Figure 2-1. Price of Crude Oil in Dollars per Barrel Over Time

Source: U.S. Energy Information Administration, Cushing, [OK WTI Spot Price FOB](#) (dollars per barrel).

2.3 Recycling Rate

In 2019, the Program achieved an all-time program high recycling rate of 22.5% in Q4, a 44% increase over Q4 2018 and resulting in overall annual recycling rate of 19.1%. This fourth quarter result is in very close alignment with the aggressive recycling rate projections presented in CARE's 2018–2022 Plan, Attachment 9, for achievement of the 24% recycling rate in December 2019. Foundational support for this recycling rate is CARE's achievement of their 71% yield rate of gross collections, a measure of recyclability—the highest ever—compared to 53% in 2018 and a historical average of 34% in the first 5 years of the Program (2011–2016). CARE's Plan projected a 60% yield achievement goal by 2022; however, aggressive capacity expansion enhancements along with expanded PC4 end markets facilitated this notable early goal accomplishment.

As detailed below, there were five major operational delays in 2019, any one of which would have contributed to hitting or exceeding the 24% recycling rate target.

While just slightly short of achieving the 24% recycling rate required by January 1, 2020, CARE's Program has continued to clearly demonstrate a consistent upward growth trend in recycling despite a handful of critical external challenges including:

- PG&E power service delivery delays to the new Aquafil-Woodland facility (Nylon-6 processor) in Northern California directly related to the devastating Paradise Fire. Full power service delivery was reasonably anticipated in May 2019 and is still not anticipated until Q3 2020.
- Municipal permitting delays for Southern California processor Los Angeles Fiber's capacity expansion project was reasonably anticipated for completion August 2019; however, due to unforeseen municipal permit outsourcing challenges the long-delayed Q1 2020 permit approval does not foresee start-up until Q3 2020.
- Tile processing equipment originally proposed by Arizona processor Planet Recycling, with 2 million pounds projected at full capacity, originally anticipated a Q1 2019 startup; however, technical equipment challenges resulted in recycled output delays until late in Q4 2019.
- Aquafil's Arizona Nylon-6 processing facility experienced unanticipated capacity challenges which heavily curtailed the production capacity initially forecast to CARE.
- XT Green, a long-anticipated and CARE-grant-funded Southern California processor, proposing to process large quantities of commercial carpet, projecting a modest Q4 2019 start-up experienced yet another series of set-backs beyond China tariffs, which included a mis-informed power delivery service level by their service provider, negotiations and related construction actions to move to a local municipal service provider and a leased property sale. This particular CARE supported initiative is now more than 4 years since grant approval.

Had the long-planned Aquafil-Woodland project come online with only half capacity at year end, their additional 15-18 million pounds of carpet recycling would have contributed to a CARE year end recycling rate exceeding the 24% recycling rate requirement.

The AB 1158 statute states a recycling rate of 24% by January 1, 2020. It does not stipulate the recycling rate must be 24% for the full year 2019. Further, such an expectation would be unrealistic given the state of recycling at the time the law was passed. Based on 81 million square yards of full year 2019 sales, the calculated discards were 304 million pounds. Thus, a full year recycling rate of 24% would have required 73 million pounds of recycled output. As it turns out, 2019 was a year of significant quarter on quarter growth resulting in 58 million pounds of recycled output.

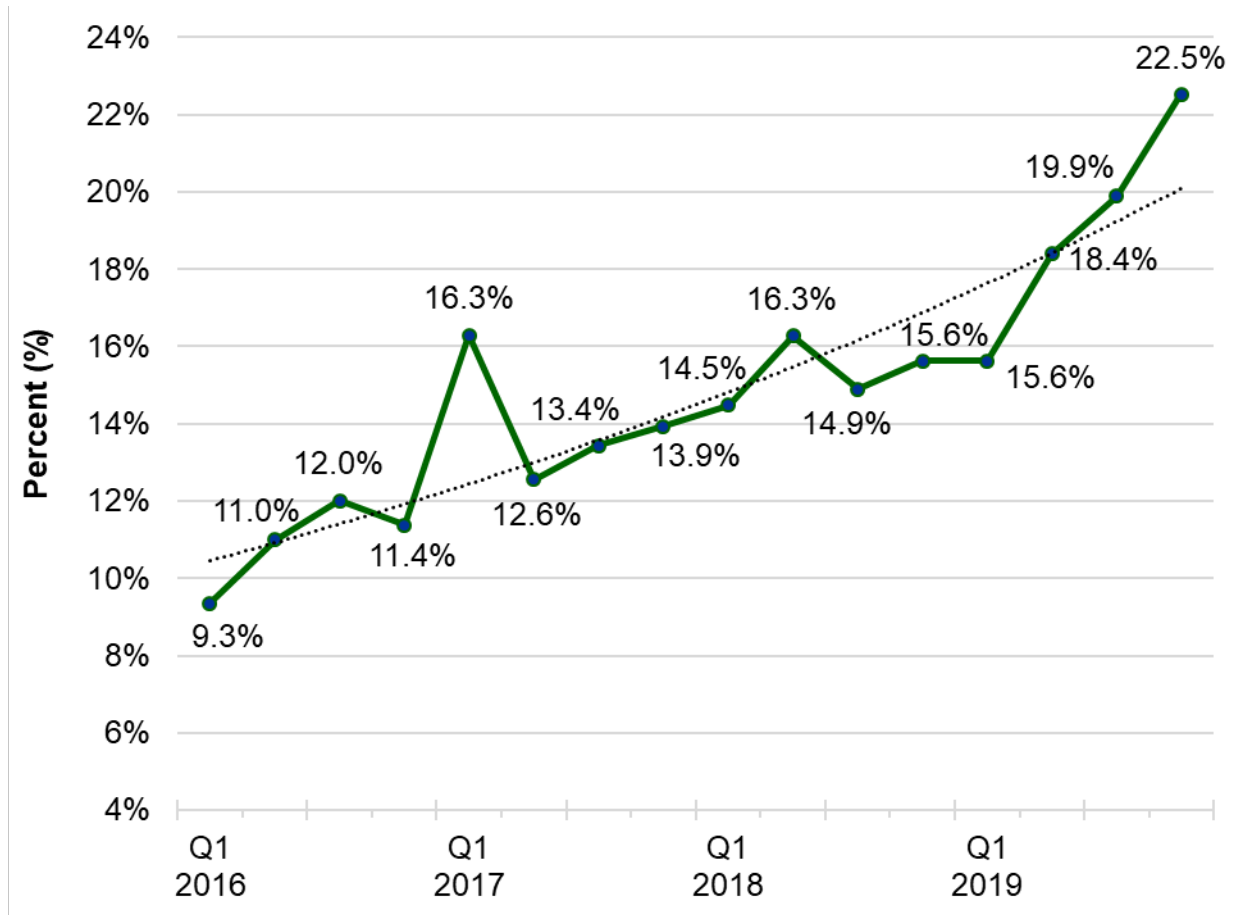
CARE took the position all along that, based on the language of the statute, achieving the targeted recycling rate by Q4 2019, would mean CARE had hit the 24% target designed as of January 1, 2020. Based on Q4 sales of 18.3 million square yards, for an estimated 69 million pounds of discards, a 24% recycling rate translates to 17 million pounds. The actual RO was 15.5 million pounds. The Program had already demonstrated 16.5 million pounds of RO in Q3 so the ability to hit 24% was there. The Program fell short by 1.5 million pounds for the full quarter. Thus, any one of the above-named projects would have pushed the Program over the top of the 24% by January 1, 2020, goal had they been operating for a full quarter.

Figure 2-2 denotes Program recycling rate achievements over time and continues to reflect a solid and steady upward trend. Building upon two past program high peaks of 16.3%, followed by reasonably predictable seasonal quarterly dips due to manufacturer demands, CARE's 2019 results represented a marked change with each quarter building upon the other. Eventual implementation of externally delayed CARE grant-funded projects and strategic CARE market development efforts in support of new Processor end market outlets has been paramount to that growth.

Other factors contributing to the lower than anticipated recycling rate for 2019 are:

- Delayed release of Cycle 2 capital grants supporting capacity expansion for both processors and manufacturers.
- Discontinuation of a PC4 end-use (eventually fully replaced in Q2 2019)
- Sale of PCC product manufacturer Fiberon, and ultimate product line discontinuation, whose decking lumber had a major impact on PET markets.

Figure 2-2. Recycling Rate, 2016–2019



2.4 Program Performance and Effectiveness

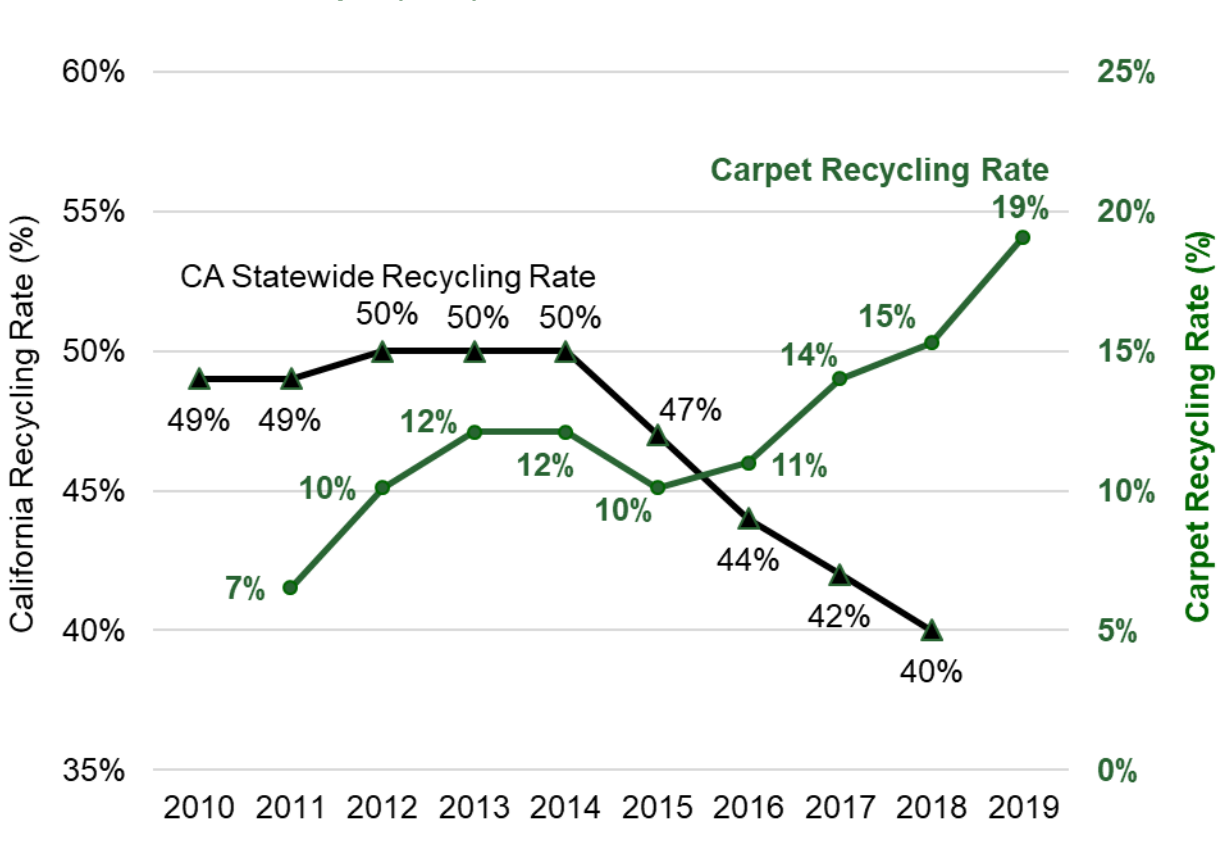
Table 2-1 presents key Program metrics over time, including carpet sales and assessment fees paid, recycling and other disposition of carpet, and greenhouse gas emissions reductions through carpet recycling.

As has been previously noted, the post-consumer carpet recycling marketplace, in comparison to other recycling markets (beverage containers, fibers, metals, etc.), is still relatively young and thereby much more susceptible to external market conditions. Conversely, as has been painfully witnessed, recycling collection programs throughout the United States which have historically benefited from the longtime strength of seemingly well-established markets, have continued to realize significant setbacks from the overall world market condition created by China National Sword. Effectually barring the import of recyclable materials, with little infrastructure strength in other areas of the world, an imbalance of supply and demand was effectuated. Over supply of recyclables drove down commodity prices and many municipalities were left making tough economic decisions to close recycling drop-off sites, limit or landfill certain recyclables

and even the discontinuance of curbside programs all together in numerous jurisdictions around the country.

Despite the plastics market impact from China’s National Sword and less than favorable forecasts on oil market pricing, which are likely to be felt for some time to come, CARE’s program has once again continued to show steady and reliably strong increasing recycling rate for twelve consecutive quarters. In an ongoing comparison of the CARE Program to the overall diversion rate in California, as shown in Figure 2-3, CARE continues to believe that the Program has successfully shown dynamic progress regardless of market setbacks.

Figure 2-3. Comparison of California Recycling Rates for Materials Statewide and for Post-Consumer Carpet (PCC)



CARE's unprecedented growth in 2019 is directly attributable to CARE's market development expansion support, CARE's strategic grant funding in support of capacity expansion efforts, a doubling in CARE Drop-off Site collection locations, CARE's deep focus outreach and education in support of collections, vigilant market expansion efforts on the part of Processors and a growing confidence by manufacturers to use PCC materials. Especially as it relates to new technology manufacturers who have signed long-term agreements for the purchase of PET agglomerated pellets to be recycled into a wider range of end-market products including glasses, automotive clearcoat products, textiles.

Based on a strong year of performance growth, CARE was well positioned going into 2020 for significant growth as delayed projects come online. In addition, the advance of chemical recycling opens a new horizon for large volume demand of key polymers, PET and PP among them. Such relationships will usher in a new level of business sophistication, capability and drive stability and profitability based on contracted supply. Indeed, the first such relationship was in place and operational with Eastman Chemical Company at the end of 2019.

Table 2-1 on the following page provides a summarized overview of CARE's program performance and effectiveness.

Table 2-1. Summary of 2019 Program Performance Metrics (see Table Notes on following page)

Metric	Unit	Baseline [1]	2017	2018	2019
Carpet Sold in CA	Square yards	98 Million	90 Million	86 Million	81 Million
Assessment Paid	Dollars	\$4.9 Million	\$22.7 Million	\$21.6 Million	\$28.2 Million
Assessment	\$/square yard	\$0.05	\$0.25	\$0.25	\$0.35
Total Expenses (All inclusive)	Dollars	\$1.6 Million	\$16.7 Million	\$18.6 Million	\$24.0 Million
Post Consumer Carpet (PCC) Discards	Pounds	357 Million	338 Million	322 Million	304 Million
Gross Collection (GC) (recovered before recycling), a.k.a. "Throughput" [2]	Pounds	100 Million 28% of discards	98 Million 29% of discards	94 Million 29% of discards	82 Million 27% of discards
Yield	GC:RO	28% of GC	48% of GC	53% of GC	71% of GC
Recycled Output (RO) (reuse, tile recycled, fiber, depoly, calcium carbonate, filler, carcass) [3]	Pounds	28 Million 8% of discards	47 Million 14% of discards	49 Million 15% of discards	58 Million 19% of discards
Recycling Rate	RO:PCC	8%	14%	15%	19%
Recycled Fiber Type 1 Processor Output	Pounds	22 Million	36 Million	36 Million	42 Million
Recycled PC4	Pounds	N/A	11 Million	13 Million	14 Million
Recycled Tile	Pounds	0.3 Million	0.9 Million	0.5 Million	0.6 Million
Reuse	Pounds	98 Thousand	414 Thousand	734 Thousand	717 Thousand
Depoly, Filler, Carcass	Pounds	6 Million	0 Million	0 Million	0.2 Million
Non-Nylon Tier-2 Manufacturer Output	Pounds	N/A	19 Million	22 Million	19 Million
Nylon 6 Tier-2 Manufacturer Output	Pounds	N/A	see note [4]	3 Million	7 Million
Reported Diversion (RO, kiln, CAAF, WTE, exports) [5]	Pounds	47 Million (13% of discards; 47% of GC)	62 Million (18% of discards; 63% of GC)	52 Million (16% of discards; 55% of GC)	58 Million (19% of discards; 71% of GC)
Carpet as an Alternative Fuel (CAAF) [6] - NON-Subsidized, 2018-2019	Pounds	0 Thousand (0.00% of discards; 0.00% of GC)	17 Thousand (0.00% of discards; 0.02% of GC)	0 Thousand (0.00% of discards; 0.00% of GC)	2 Thousand (0.00% of discards; 0.00% of GC)
Kiln [6] - NON-Subsidized, 2018-2019	Pounds	0.0 Million (0.00% of discards; 0.00% of GC)	1.9 Million (0.58% of discards; 1.99% of GC)	0.0 Million (0.00% of discards; 0.00% of GC)	17.3 Thousand (0.01% of discards; 0.02% of GC)
Waste-To-Energy (WTE) [6] - Never Subsidized	WTE: PCC	15.7 Million (4% of discards; 16% of GC)	9.8 Million (3% of discards; 10% of GC)	1.8 Million (1% of discards; 2% of GC)	0.0 Million (0% of discards; 0% of GC)
Net Diversion (calculated as GC - Waste back to LF) [7]	Pounds	78 Million (22% of discards; 78% of GC)	79 Million (23% of discards; 80% of GC)	70 Million (22% of discards; 75% of GC)	66 Million (22% of discards; 80% of GC)
Source Reduction (SR)	Pounds	4.2/yd ²	4.39/yd ²	4.39/yd ²	4.48/yd ²
Pad Recycling (not counted toward diversion)	Pounds	3.2 Million	5.9 Million	9.1 Million	8.5 Million
Waste to Landfill (LF) [8]	Pounds	22.2 Million	19.4 Million	23.2 Million	16.1 Million
Total PCC Waste Disposal to LF [9]	Pounds	279 Million	259 Million	251 Million	238 Million
Greenhouse Gas (GHG) Emissions	MTCO ₂ E	(24,926)	(49,187)	(58,029)	(70,118)

Table Notes: Table 2-1 compares Baseline Year (7/2011–6/2012) with data from the three most recent calendar years (2017–2019). For data from 2012–2016, see [Annual Report 2017](#). The table has been amended to include Advisory Committee comments: deleted Reported Diversion which had included carpet cushion/pad, denotes NON-subsidized categories which contribute to Diversion (see Note [6] below). Metric definitions are current at the end of 2019; definitions have evolved over time and may have been different in the past.

- [1] **Baseline** year is July 2011 through June 2012. All other years are calendar years (January through December).
- [2] **Gross Collection (GC)** is the quantity of material recovered before recycling, also known as "Throughput."
- [3] **Recycled Output (RO)** includes reuse, tile recycled, fiber, depoly, calcium carbonate, filler, and carcass.
- [4] **Nylon 6** subsidy was implemented in Q4 2017. However, the nylon 6 pounds were explicitly omitted from the 2017 total due to confidentiality concerns because all pounds were submitted by a single manufacturer. Nylon 6 pounds are reported in 2019 because multiple manufacturers are now reporting pounds in this category.
- [5] **Reported Diversion** consists of Recycled Output (RO), kiln, CAAF, WTE, and exports.
- [6] **CAAF and Kiln** were NOT subsidized in 2018 and beyond. **WTE** has never been subsidized.
- [7] **Net Diversion** is calculated as Gross Collection minus Waste back to Landfill.
- [8] **Waste to Landfill (LF)** refers to waste generating during processing, also referred to as processing waste.
- [9] **Total PCC Waste Disposal to Landfill** refers to all PCC waste disposed of in a landfill, inclusive of process waste. It is calculated as the difference between the total PCC Discards minus Net Diversion.

Per the request of the Advisory Committee, the following supplemental tables are presented. Table 2-2 denotes the Program components that are counted toward Diversion yet receive no subsidy. Table 2-3 tabulates the subsidized components that compose the overall Recycled Output of 59 million pounds.

Table 2-2. Non-Subsidized Diversion by Type (millions of pounds)

Non-Subsidized Diversion by Type	2018	2019
Carpet As Alternative Fuel	0	0
Kiln	0	0
Waste-To-Energy (WTE)	1.8	0
Carcass	0	0.2
Exports	0.6	0.5
Carpet Cushion/Pad	9.1	8.5

Table 2-3. Recycled Output by Type (millions of pounds)

Recycled Output (RO) Components	2018	2019
Reuse	0.7	0.7
Tile Recycled	0.5	0.6
Fiber	36	43
Depoly	0	0
PC4	12	14
Filler	0	0
Carcass	0	0.2
Total	49	59

Overall recyclability as indicated by yield increased in 2019 to 71% of gross collections—the highest ever—compared to 53% in 2018 and a historical average of 34% in the first 5 years of the Program (2011–2016).

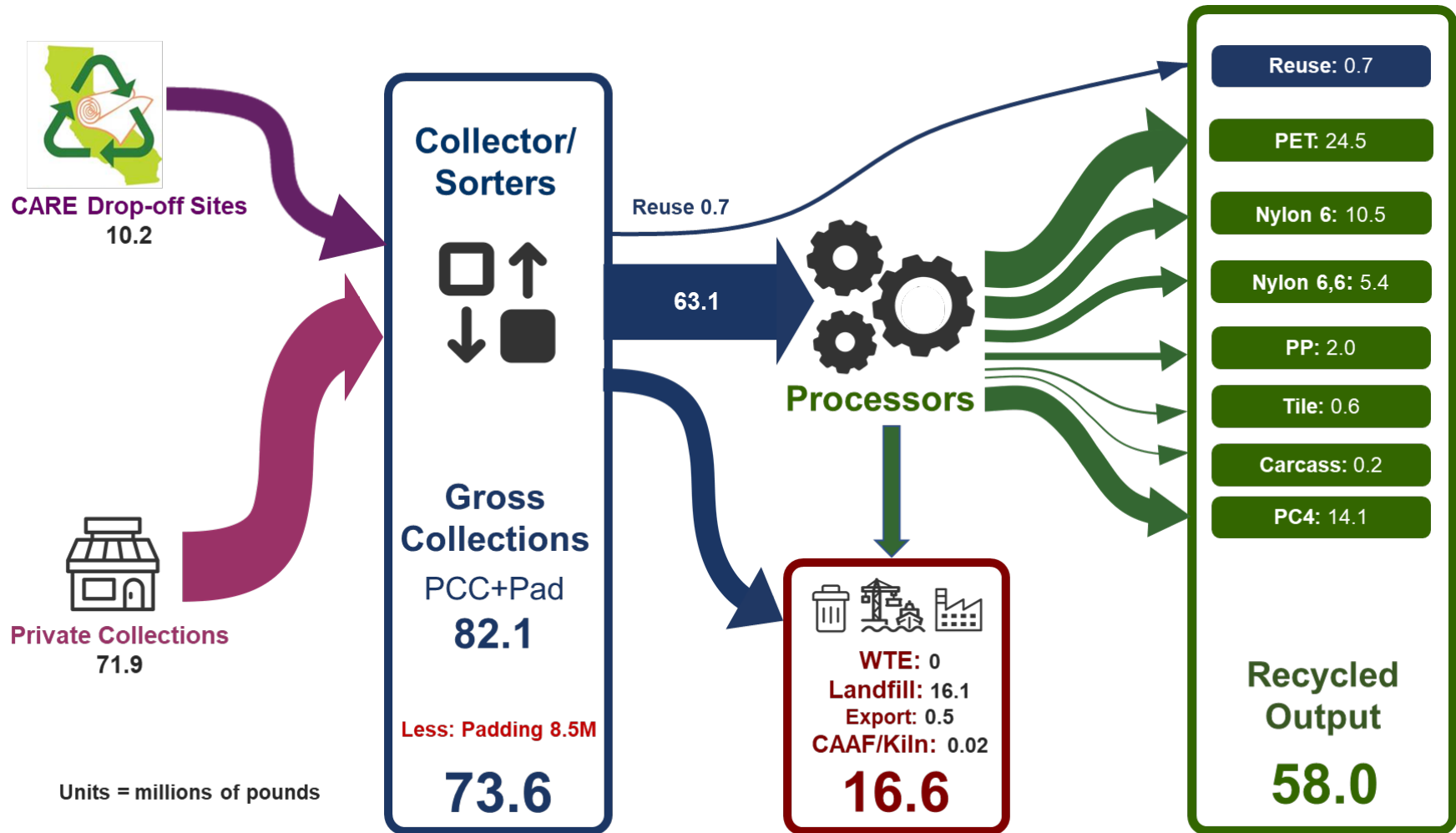
Figure 2-4 provides a visual mapping of the flow of carpet materials through the Program from collection (on the left of the graphic), through sorting and processing (in the center), to the final subsidized Recycled Output category (on the right) or other disposition (on the bottom). The Program received an estimated 82.1 million pounds of Gross Collections at Collector/Sorter facilities from both CARE Drop-off Sites (DoS) and

Collector/Sorter Private Collection Sites and self-haul. The Program collected 10.2 million pounds of PCC (and pad) through its public Drop-off Sites in 2019, with these quantities tracked through certified weight tickets. An estimated 71.9 million pounds of PCC are collected or received by Collector/Sorters; these materials typically arrive in trailer-load quantities, most of which are not weighed. Verified weights for PCC/pad collected through private collection sites are not required, as there generally is no payment for these materials at this time. It should be noted that for CARE's monthly reporting purposes, estimates of gross weight collected by container or trailer type have been deemed acceptable for tracking. Collector/Sorter subsidy payments are only paid out on PCC after received PCC is identified, sorted, sold/transferred, weighed and shipped to a Processor or end user (including exports).

The combined 82.1 million pounds of gross collected carpet (including pad) are delivered to Collector/Sorter locations for identification and sorting. When pad is sorted, baled, and sold by weight from Collector/Sorters, the 8.5 million pounds of pad is deducted from the gross collected carpet, leaving an approximate 73.6 million pounds of carpet available for reuse or processing. During 2019, 0.7 million pounds of carpet was diverted to reuse, and 63.1 million pounds of carpet was sent to Processors. It should be noted that between Collector/Sorters receiving carpet and Processors demanufacturing the sorted carpet, some materials are not recyclable either due to moisture, excessive contamination, or lack of current end markets. Combined discard of non-recyclable materials or processing waste during 2019 totaled 16.6 million pounds. Of that 16.6 million pounds, none went to Waste-To-Energy, 16.1 million pounds went to landfill, 0.05 million pounds was Export (from Collector/Sorters only), and 0.02 million pounds went to CAAF/Kiln; these figures do not count as diversion toward Recycle Output.

Of the 63.1 million pounds sent to Processors, after deducting the discarded materials to either landfill or CAAF/Kiln (16.1 and 0.02 million pounds respectively), the resulting output of recycled carpet materials are shown in the Recycled Output box on the right. Including the 0.7 million pounds of reuse from Collector/Sorters, the Recycled Output volumes are 24.5 million pounds of PET, 10.5 million pounds of Nylon 6, 5.4 million pounds of Nylon 6,6, 2.0 million pounds of polypropylene, 0.6 million pounds of tile recycling, 0.2 million pounds of carcass, and 14.1 million pounds of PC4. The total of all Recycled Output material categories, as recognized by CalRecycle, is 58 million pounds.

Figure 2-4. Carpet Materials Flow Diagram, 2019 (millions of pounds)



Following are calculations on the flow of PCC materials through the above Carpet Materials Flow Diagram for 2019:

Collector/Sorters:

82.1 million pounds Gross Collections from CARE Drop-off Sites & Private Collection Sites (includes carpet and pad)
-8.5 million pounds Pad (sold by Collector/Sorters, certified weights) =
73.6 million pounds Gross Collections PCC for Identification and Sorting

Collector/Sorters to Reuse, Export, Processors, Disposal:

58.0 million pounds Recycled Output from Processors to Manufacturers
16.6 million pounds Landfill, Export, WTE, CAAF/Kiln from Collector/Sorters and Processors
-3.6 million pounds **Inventory Drop*** (Collector/Sorter & Processor use of Beginning Inventory to produce Recycled Outputs) =
70.9 million pounds

***Inventory Drop (Use):**

8.1 million pounds of 2019 Beginning Inventory (Collector/Sorters and Processors)
-4.5 million pounds of 2019 Ending Inventory (Collector/Sorters and Processors) =
-3.6 million pounds

2.6 million pounds Difference (3%), attributed to trailer weight estimations, moisture, other loss, and rounding

2.5 Report Organization

This 2019 Annual Report is organized into the following Chapters, following the requirements of the Carpet Stewardship Law:

Chapter 1. **Contact Information**

Chapter 2. **Executive Summary**

Chapter 3. **Scope**

Chapter 4. **Program Outline: Collection & Recycling Sites**

Chapter 5. **Program Goals & Activities**

Chapter 6. **Market Development**

Chapter 7. **Financing Mechanisms**

Chapter 8. **Outreach/Education**

Chapter 9. **Audits**

Chapter 10. **Appendices**

3 Scope

CCR Section 18944(a)(3). Scope. *The program described in the stewardship plan accepts and manages all applicable post-consumer carpet.*

- (A) *Indicate any changes in the program scope from the approved stewardship plan.*
- (B) *Indicate the scope is unchanged, if no changes have occurred during the reporting period.*

3.1 Overview of Major Program Activities in 2019

CARE's 2018–2022 five-year plan was conditionally approved in October 2018 and formally approved in February 2019 with the addition of Chapter 0. Concurrent with development and approval of the Plan, CARE prepared and promptly implemented several 2018–2022 Plan measures upon approval by CalRecycle. Since establishment of the Carpet Stewardship Law with AB 2398, the Program has adjusted over time to address two amendments: AB 1158 in 2017 and the new AB 729, which was adopted into law in October 2019 and took effect on January 1, 2020. AB 729, therefore, is therefore not a major factor in this report. To follow the law as well as the updated Plan, the Program implemented the following activities in 2019.

3.1.1 Incentives for Highest Recyclability

With input from industry, the Advisory Committee, legislators, and CalRecycle, CARE introduced criteria defining Highest Recyclability (see Section 6.2.1) in 2018. The Program incorporated some of these criteria into its grant evaluation process and introduced two new incentives that took effect on January 1, 2019:

1. Highest Recyclability for processors on all nylon: \$0.05 per pound with no tiers.
2. Nylon 6,6 manufacturer subsidy: \$0.10 per pound.

Further detail on assessment funds can be found in Section 3.4.1.

3.1.2 Grants

In 2019, grants were structured to provide incentives for processing capacity expansion and manufacturing, with an added emphasis on highest recyclability materials. Cycle 2A and 2B grants (2018–2019) started in October 2018 and continued into 2019. More than \$2 million was released to Cycle 2A and 2B projects in 2019, leading to more than 20 million pounds of recycled output and an additional 2.5 million pounds of manufactured

output added through these projects in 2019. In 2019, Cycle 3A of capital grants funded six projects for a total of over \$1.5 million; the grants will establish or expand operations between Q4 2019 and Q3 of 2020. For more information on grants in 2019, please see Section 6.2.2 and Section 6.2.3.

3.1.3 Support and Incentives to Increase On-Site Collection and Drop-off Sites

The Program partnered with three regional hauling services in an effort to provide on-site carpet recycling collection service for small- to medium-sized retail stores. To encourage support for new on-site service, CARE offered a \$500 incentive to each retailer willing to adopt recycling pick-up service for a minimum 12-month term. Support of the collection service effort included offering and awarding of micro-grants to three local Greater Sacramento Area haulers in 2018–2019 to increase their number of closed-top containers. The Program added 22 new public drop-off sites in 8 new counties, for a total of 50 counties served in 2019. In an ongoing commitment and effort to ensure one CARE public Drop-off Site in every county, CARE is contracting with widely regarded Rural Counties Specialist Mary Pitto in providing a high priority focus specifically tailored to meet the unique Rural County needs. For more information on collection sites, please refer to Section 4.2.

**The Program added 22 new
Public Drop-off Sites in 8 counties,
a 100% increase over prior years**

3.1.4 Training to Apprentice- and Journey-level Programs

In 2019, the Program expanded their commitment to state-approved training programs for apprentice- and journey-level carpet installers regarding proper carpet recycling practices. In direct partnership with District Council 16 of International Union of Painters and Allied Trades (IUPAT), Carpet, Linoleum & Soft Tile Workers Local Union No. 12, CARE executed the delivery of interactive trainings given to apprentice installers. Additionally, Program staff hosted an educational tabling during the inaugural Flooring Forum at the San Leandro union training center. Section 5.16.1 and Section 8.4 provides more information on training and outreach for apprentice and journey-level programs.

3.1.5 Increase the Reuse of Post-Consumer Carpet

In an ongoing effort to increase the reuse of post-consumer carpet, the Program continues to offer micro-grant eligibility for reuse programs. Similarly, CARE offered reuse promotional and marketing support efforts, to Collector/Sorters sorting tile for reuse and their end market outlets. To further support growth and ensure that expansion of the reuse market is not adversely impacted by reused carpet not meeting the performance expectations CARE developed specific Reuse Guidelines monitored via AUPs.

3.2 Program Description

Signed into law in September 2010, California's Assembly Bill 2398 was the first of its kind carpet stewardship program supported by legislators, California entrepreneurs, local governments, nongovernmental organizations, and the carpet industry. AB 2398 designated CARE as the Carpet Stewardship Organization (CSO) for the carpet industry. The Carpet Stewardship Law was amended in 2017 (AB 1158) and 2019 (AB 729), with changes taking effect in 2018 and 2020, respectively. In this annual report, the Program presents its progress with regard to the following eight performance goals included in the California Carpet Stewardship Plan 2018–2022, which responds to the state's requirements:

1. Increase the recyclability of carpet.
2. Expand and incentivize markets for products made from post-consumer carpet.
3. Increase the reuse of post-consumer carpet.
4. Increase the weight of post-consumer carpet that is recycled.
5. Reduce the disposal of post-consumer carpet.
6. Increase the collection convenience for the recycling of post-consumer carpet and increase the collection of post-consumer carpet for recycling.
7. Increase processor capacity, including processor capacity in California.
8. Achieve a 24-percent recycling rate for post-consumer carpet by January 1, 2020, and any other recycling rate established by the Department pursuant to Section 42972.2.

The 2018–2022 California Carpet Stewardship Plan, approved with the addition of Chapter 0, replaces the prior 2011–2016 Plan and its three addenda. The updated 2018–2022 Plan received final approval from CalRecycle on February 20, 2019.

As of December 31, 2019, the extended 2011–2016 Plan included 77 carpet mill participants. Appendix 10.5 lists the names of participating carpet mills, which are also updated on the [CalRecycle website](#).

These eight fundamental goals continued to guide the program, and major metrics related to Program performance goals are summarized by year in Table 3-1. These metrics are compared to a baseline year, defined by CalRecycle as the Program's first 12 months of operation from July 1, 2011, to June 30, 2012. Other metrics in the table are reported by calendar year from January 1 to December 31. Table 3-1 in the 2019 Annual Report, as reformatted based upon 2019 Advisory Committee feedback, has been consolidated for viewing convenience, showing the baseline period and the three most recent years. For those seeking the intervening years (2012–2016), please reference the 2017 Annual Report.

Table 3-1. Summary of 2019 Program Performance Metrics (see Table Notes on following page)

Metric	Unit	Baseline [1]	2017	2018	2019
Carpet Sold in CA	Square yards	98 Million	90 Million	86 Million	81 Million
Assessment Paid	Dollars	\$4.9 Million	\$22.7 Million	\$21.6 Million	\$28.2 Million
Assessment	\$/square yard	\$0.05	\$0.25	\$0.25	\$0.35
Total Expenses (All inclusive)	Dollars	\$1.6 Million	\$16.7 Million	\$18.6 Million	\$24.0 Million
Post Consumer Carpet (PCC) Discards	Pounds	357 Million	338 Million	322 Million	304 Million
Gross Collection (GC) (recovered before recycling), a.k.a. "Throughput" [2]	Pounds	100 Million 28% of discards	98 Million 29% of discards	94 Million 29% of discards	82 Million 27% of discards
Yield	GC:RO	28% of GC	48% of GC	53% of GC	71% of GC
Recycled Output (RO) (reuse, tile recycled, fiber, depoly, calcium carbonate, filler, carcass) [3]	Pounds	28 Million 8% of discards	47 Million 14% of discards	49 Million 15% of discards	58 Million 19% of discards
Recycling Rate	RO:PCC	8%	14%	15%	19%
Recycled Fiber Type 1 Processor Output	Pounds	22 Million	36 Million	36 Million	42 Million
Recycled PC4	Pounds	N/A	11 Million	13 Million	14 Million
Recycled Tile	Pounds	0.3 Million	0.9 Million	0.5 Million	0.6 Million
Reuse	Pounds	98 Thousand	414 Thousand	734 Thousand	717 Thousand
Depoly, Filler, Carcass	Pounds	6 Million	0 Million	0 Million	0.2 Million
Non-Nylon Tier-2 Manufacturer Output	Pounds	N/A	19 Million	22 Million	19 Million
Nylon 6 Tier-2 Manufacturer Output	Pounds	N/A	see note [4]	3 Million	7 Million
Reported Diversion (RO, kiln, CAAF, WTE, exports) [5]	Pounds	47 Million (13% of discards; 47% of GC)	62 Million (18% of discards; 63% of GC)	52 Million (16% of discards; 55% of GC)	58 Million (19% of discards; 71% of GC)
Carpet as an Alternative Fuel (CAAF) [6] - NON-Subsidized, 2018-2019	Pounds	0 Thousand (0.00% of discards; 0.00% of GC)	17 Thousand (0.00% of discards; 0.02% of GC)	0 Thousand (0.00% of discards; 0.00% of GC)	2 Thousand (0.00% of discards; 0.00% of GC)
Kiln [6] - NON-Subsidized, 2018-2019	Pounds	0.0 Million (0.00% of discards; 0.00% of GC)	1.9 Million (0.58% of discards; 1.99% of GC)	0.0 Million (0.00% of discards; 0.00% of GC)	17.3 Thousand (0.01% of discards; 0.02% of GC)
Waste-To-Energy (WTE) [6] - Never Subsidized	WTE: PCC	15.7 Million (4% of discards; 16% of GC)	9.8 Million (3% of discards; 10% of GC)	1.8 Million (1% of discards; 2% of GC)	0.0 Million (0% of discards; 0% of GC)
Net Diversion (calculated as GC - Waste back to LF) [7]	Pounds	78 Million (22% of discards; 78% of GC)	79 Million (23% of discards; 80% of GC)	70 Million (22% of discards; 75% of GC)	66 Million (22% of discards; 80% of GC)
Source Reduction (SR)	Pounds	4.2/yd ²	4.39/yd ²	4.39/yd ²	4.48/yd ²
Pad Recycling (not counted toward diversion)	Pounds	3.2 Million	5.9 Million	9.1 Million	8.5 Million
Waste to Landfill (LF) [8]	Pounds	22.2 Million	19.4 Million	23.2 Million	16.1 Million
Total PCC Waste Disposal to LF [9]	Pounds	279 Million	259 Million	251 Million	238 Million
Greenhouse Gas (GHG) Emissions	MTCO ₂ E	(24,926)	(49,187)	(58,029)	(70,118)

Table Notes: Table 3-1 compares Baseline Year (7/2011–6/2012) with data from the three most recent calendar years (2016–2018). For data from 2012–2015, see [Annual Report 2017](#). The table has been amended to include Advisory Committee comments: deleted Reported Diversion which had included carpet cushion/pad, denotes NON-subsidized categories which contribute to Diversion [see Note 6 below]. Metric definitions are current at the end of 2019; definitions have evolved over time and may have been different in the past.

- [1] **Baseline** year is July 2011 through June 2012. All other years are calendar years (January through December).
- [2] **Gross Collection (GC)** is the quantity of material recovered before recycling, also known as "Throughput."
- [3] **Recycled Output (RO)** includes reuse, tile recycled, fiber, depoly, calcium carbonate, filler, and carcass.
- [4] **Nylon 6** subsidy was implemented in Q4 2017. However, the nylon 6 pounds were explicitly omitted from the 2017 total due to confidentiality concerns because all pounds were submitted by a single manufacturer. Nylon 6 pounds are reported in 2019 because multiple manufacturers are now reporting pounds in this category.
- [5] **Reported Diversion** consists of Recycled Output (RO), kiln, CAAF, WTE, and exports.
- [6] **CAAF and Kiln** were NOT subsidized in 2018 and beyond. **WTE** has never been subsidized.
- [7] **Net Diversion** is calculated as Gross Collection minus Waste back to Landfill.
- [8] **Waste to Landfill (LF)** refers to waste generating during processing, also referred to as processing waste.
- [9] **Total PCC Waste Disposal to Landfill** refers to all PCC waste disposed of in a landfill, inclusive of process waste. It is calculated as the difference between the total PCC Discards minus Net Diversion.

3.3 Changes in Program Scope

The 2018–2022 California Carpet Stewardship Plan details fiduciary, financial, educational, and marketing strategies to accomplish the goals of the collective Carpet Stewardship Law. Consistent with the updated law, the new Plan—and thus the Program in 2019 and beyond—is designed to advance these eight principal goals:

1. Increase the recyclability of carpet.
2. Expand and incentivize markets for products made from post-consumer carpet.
3. Increase reuse of post-consumer carpet.
4. Increase the weight of post-consumer carpet that is recycled.
5. Reduce the disposal of post-consumer carpet.
6. Increase the collection convenience for recycling post-consumer carpet and increase the collection of post-consumer carpet for recycling.
7. Increase processor capacity, including processor capacity in California.
8. Achieve a 24% recycling rate for post-consumer carpet by January 1, 2020 and any other recycling rate established by the Department.

The Program is also committed to the following:

- Provide incentives or grants to state-approved apprenticeship programs for training apprentice and journey-level carpet installers in proper carpet recycling practices.
- Structure grants and subsidies to incentivize Highest Recyclability.
- Ensure that assessment fee funds shall not be expended on penalties or litigation against the state.
- Ensure that subsidies for Carpet As Alternative Fuel (CAAF) and Kiln are discontinued.

The 2018–2022 Plan also included the following commitments made in Chapter 0 and due by September 1, 2019:

- I. Include commitments to accomplish all of the following and describe how it will fulfill these commitments by September 1, 2019:
 - a. Conduct and provide to CalRecycle an independent, detailed economic analysis to validate the Subsidy Justification and Conversion Cost Models that justifies the assessment based on actual costs of program participants,

- (and provide an aggregated version of the analysis to be included into the Plan). This must include a summary of the range of costs for collecting, processing, and recycling different materials, along with other programmatic expenditures, that is sufficient to estimate how much overall funding and therefore what assessment level is needed to achieve the goal of a 24 percent recycling rate by January 1, 2020 and 26 percent by 2022.
- b. Update the Subsidy Justification Model and the Conversion Cost Model by 9/1/2019, and every six months thereafter; review changes to the models with CalRecycle staff, and present recommended changes to subsidies to CalRecycle for approval.
 - c. Demonstrate CARE's Subsidy Justification and Conversion Cost Models use California-specific data and account for regional cost differences. A commitment to demonstrate to what extent its economic analysis accounts for regional differences in cost data.
- II. With respect to convenience, CARE must include its commitments to accomplish all of the following and describe how it will fulfill these commitments:
- a. Submit modifications to its convenience goals that are consistent with the results of the convenience study to CalRecycle; and
 - b. Complete audits of participating Collector/Sorters to ensure compliance with the revised Agreed Upon Procedures (AUPs) that support convenient collection (see below – refers to page 9 of original CalRecycle RFA).
- III. With respect to incentivizing markets for products made from post-consumer carpet, CARE must include its commitment to accomplish the following and describe how it will fulfill this commitment:
- a. Establish a minimum weight of post-consumer carpet content a product must contain, on an annual basis, to be considered as a product made from post-consumer carpet.
- IV. With respect to source reduction, CARE must include its commitment to accomplish the following and describe how it will fulfill this commitment:
- a. Develop AUPs for reuse. The AUPs must describe the documentation, processes, and procedures that must be kept and followed by reuse incentive recipients. The AUPs should also ensure that expansion of the reuse market is not adversely impacted by reused carpet not meeting the performance expectations.
- V. CARE must also complete and include all of the following:
- a. Expanded and implementable collection procedures in CARE's AUPs for Collector/Sorters to support Program convenience, including but not limited to, requirements that all carpet types must be accepted, and carpet is transported to a processor participating in CARE's Program and not directly to a landfill;

- b. A proposed timeline for auditing Collector/Sorters to ensure compliance with the revised AUPs; and
- c. Clarifications and corrections to the revised Plan as specified in CalRecycle Attachment 5.

In addition, all corrections requested by CalRecycle in Attachment 5 were made to the Plan.

On September 1, 2019, the Program submitted its *Chapter 0 Report* describing its responses to the commitments summarized above. The *Chapter 0 Report* provides detailed updates on the Program's efforts on these topics in 2019. It is available on CARE's website and incorporated into this annual report by reference.¹

3.4 Summary of Program Changes

This section addresses changes in Program implementation with the addition of Chapter 0 to the 2018–2022 Plan and the passage of new legislation in fall 2019. Specifically, it describes the assessment fee and the work of the Carpet Advisory Committee in 2019.

3.4.1 Assessment Funds and Subsidies

Following the new 2018–2022 Plan, the Program increased the Assessment Fee on sales of new carpet to \$0.35 per square yard, effective January 1, 2019. All outreach, education and advance notification for Assessment Fee increase took place in 2018, six months prior to implementation.

The \$0.35 per square yard assessment fee collected in 2019 continued to support Program enhancements described in the Plan and resulting increases in recycled output. The funding collected from the assessment support Program efforts including but not limited to the subsidies summarized in Table 3-2, Table 3-3, and Table 3-4 below and described in more detail in Chapters 4, 5, 6, and 7 depending on the subsidy type and target.

- New 2019 subsidy changes:
 - New Highest Recyclability incentive for processors on all nylon – \$0.05 per pound (new, effective January 1, 2019, no tiers).
 - New nylon 6,6 manufacturer subsidy – \$0.10 per pound (new, effective January 1, 2019).
 - New, Tier 2 Manufacturer PET Pellets Payout for California-generated PET fiber converted into PET Pellets – \$0.11 per pound (new, effective October 1, 2019, no tiers).

¹ [California Carpet Stewardship Program, Chapter 0 Report](#), September 1, 2019.

Table 3-2. Summary of Subsidies for Collector/Sorters, 2019

Collector/Sorter Subsidies	Subsidy Rate
Collector/Sorter Reporting Incentive	\$1,000 per month
Tile Reuse or Recycling Collected, Sold, and Shipped Payout (Pilot)	\$0.05 per pound
Tile Reuse Payout	\$0.10 per pound
Broadloom Reuse Payout	\$0.10 per pound
Broadloom Recycling Collected, Sold and Shipped	\$0.02 per pound

Table 3-3. Summary of Subsidies for Processors, 2019

Processor Subsidies	Rate per Pound
Tile Recycled Payout	\$0.10
Type 1 Output (Fiber and DePoly only) Payout	\$0.10
Type 2 Output (Filler and Carcass only) Payout	\$0.03
Type 2 Calcium Carbonate (PC4) Payout	\$0.17
Highest Recyclability [1]	\$0.05
Broadloom Commercial Carpet Payout (currently suspended) [2]	\$0.02

[1] *The **Highest Recyclability** subsidy began in Q1 2019.*

[2] *The **Broadloom Commercial Carpet Payout** was never operationalized and is suspended at this time.*

Table 3-4. Summary of Subsidies for Manufacturers, 2019

Manufacturer Subsidies	Rate per Pound
PET Payout	\$0.25
PET Pellet Payout [3]	\$0.11
Polypropylene Payout	\$0.25
Nylon 6 Payout	\$0.10
Nylon 6,6 Payout [4]	\$0.10

[3] *The **PET Pellet Payout** began in Q4 2019.*

[4] *The **Nylon 6,6 Payout** began in Q1 2019.*

- In 2019, the Program continued using its online monthly reporting system, now known as Planful (previously called HOST Analytics). The system replaces the previous Excel spreadsheets with online reporting forms and provides a convenient dashboard view of Program metrics. (Copies of the prior Excel reporting forms can be found in Appendix 10.9 of the 2018 Annual Report.)
- Grants Cycle 2 and Cycle 3 were issued in 2019 and were structured to provide incentives for processing and manufacturing the highest recyclability materials. Please see Section 6.2.2 and Section 6.2.3 provide more details on grants issued in 2019.
- The Program continued its work toward establishing at least one carpet drop-off site in every county in California and meeting goals for convenient collection. Efforts included ongoing marketing/education/outreach to retailers, installers, and consumers and “Buy Recycled” market development efforts to expand and promote recycled and recyclable carpet products as described further in Section 4.2, Chapter 6, and Chapter 8.

These efforts are critical to expanding markets for recycled output and increasing diversion from landfill, as mandated by Carpet Stewardship Law. Despite many challenges, the Program achieved its highest recycling rate of 22.5% in Q4 of 2019, a 44% increase over Q4 2018 and resulting in overall annual recycling rate of 19.1%. To meet its financial obligations and cover Program expenses, it was necessary to collect additional funds through the assessment.

3.4.2 Carpet Advisory Committee

The Carpet Advisory Committee established in 2018 under AB 1158 continued its work in 2019. The Advisory Committee includes representatives from local government, recycling industry stakeholders, environmental organizations, flooring unions and contractors, carpet retailers, and carpet manufacturers. The Committee is appointed to provide recommendations to a carpet manufacturer or stewardship organization and to CalRecycle on carpet stewardship plans, plan amendments, and annual reports.

The Program is required to ensure that the Committee receives copies of annual reports, stewardship plans or stewardship plan amendments no less than 30 days prior to final submittal to CalRecycle. CARE is required to review recommendations, and to the extent feasible incorporate those changes prior to CalRecycle submission or respond to the Committee why those changes may only be accepted in part or not at all.

During 2019, the Advisory Committee met six times to conduct business on matters including but not limited to the following topics:

- Review of CARE responses to Advisory Committee recommendations and prioritization of key elements.
- Review of the 2018 Annual Report.

- Review of Convenient Collection Study.
- Review of Economic, Financial, and Conversion Cost Models.
- Review of Outreach Efforts.
- Meet new CARE team member (Product & Market Development Manager).
- Discussion of carpet stewardship legislation in California, including AB 729, as well as in other states.
- Review of the Chapter 0 Report on implementation status.

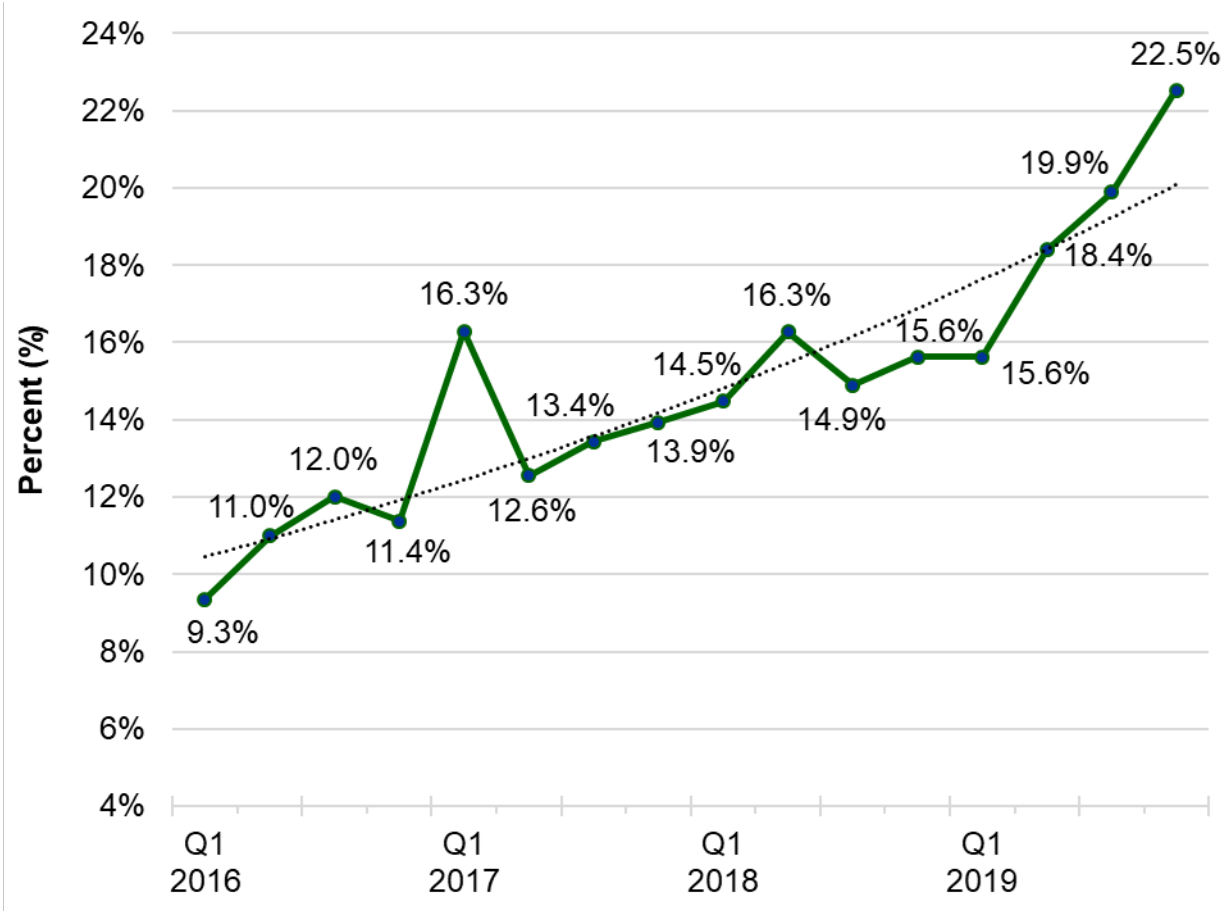
CalRecycle provides information on the [Carpet Stewardship Program Advisory Committee](#) on the agency's website. Appendix 10.9 provides copies of CARE's responses to any Advisory Committee recommendations, and Appendix 10.11 provides CARE's response to Advisory Committee feedback on the draft of this 2019 Annual Report.

3.5 Laying a Foundation for Change

The Program continued to work to stimulate the market in 2019 for lasting change, with new efforts implemented through the new 2018–2022 Plan. Efforts included implementation of the new Plan, ongoing stakeholder collaboration with the Advisory Committee, and expanding processing and manufacturing infrastructure capacity in California through grants, technical assistance support, research and testing, product development and participation in various trade events to build market support and demand for products with post-consumer carpet content.

The Program made strategically aggressive moves in 2019 in an effort to “catch up” from past delays in grant releases in support of collection and capacity expansion. Several significant and uncontrollable capacity addition and expansion challenges, which had they come online as anticipated, would have enabled the program to easily achieve the 24% recycling rate. Despite those challenges, the Program did realize the most consistent and reliable quarter over quarter gains in the history of the program. Comparing Q4 2018 to Q4 2019 the Program realized a 44% gain, reaching its highest level to date in Q4 2019, as shown in Figure 3-1.

Figure 3-1. Recycling Rate, 2016–2019



The new resources and incentives implemented in 2019 have supported recycling growth. Capacity increases in the processing and Tier 2 manufacturing sectors are expected to help this growth continue into the future and achieve the Program’s performance goals (see Sections 4.5, 4.6 and 4.9 for more detail).

4 Program Outline: Collection & Recycling Sites

CCR Section 18944(a)(4). Program Outline. Describe the carpet stewardship program, including information on the following topics:

- (A) Types of collection sites and basic information about recycling facilities in California, e.g., how carpet is collected, number and location of processors, throughput and capacity of recycling facilities.
- (B) Include facility name(s) and address(es) for each method of disposition.

4.1 Program Description

The California Carpet Stewardship Program is responsible for increasing recycling and diversion of California post-consumer carpet (PCC) on behalf of carpet mills that sell or distribute their products in the state and participate in CARE's approved Plan. The Program targets all carpet material types, including residential and commercial, indoor and outdoor, and broadloom carpet and carpet tile materials. It excludes rugs, underlayment, carpet cushion, and synthetic turf.

For all manufactured carpet that is sold and shipped into California by mills, distributors or importers (referred herein generally as "mills"), those entities are required to submit quarterly CalRecycle-approved assessments to CARE. Retailers receiving carpet from mills/distributors/importers are required to remit assessment monies to mills/distributors/importers. Final payment for recycling assessment monies is paid by the end-user/consumer of the carpet when assessment fees are billed on a final invoice. These assessment funds are used by the Program to increase carpet recycling and diversion opportunities and achieve other program goals consistent with Carpet Stewardship Law. The mills are audited using Agreed Upon Procedures (AUPs) on a recurring periodic basis. Larger mills are prioritized to minimize risk and consistent with a CalRecycle auditor recommendation.

Assessment funds support public and CARE operated carpet collections/drop-off sites, independent Collector/Sorters (private collection network), recycling (Tier 1 processors) and recycled product manufacturing (Tier 2 manufacturers), market development, grants, outreach and education, technical assistance, general program costs and program administration. Funds also reimburse program administrative oversight activities by CalRecycle per Carpet Stewardship Law. With the passage of AB 729 in 2019, the 5% cap on administrative oversight was removed effective January 1, 2020.

For the public, the carpet recycling process starts with identifying public drop-off sites throughout the state in both urban and rural areas or choosing a flooring retailer or contractor that recycles PCC with the purchase of new carpet or flooring.

4. Program Outline: Collection & Recycling Sites

Collector/Sorter Entrepreneurs (known as Collector/Sorters or CSEs) receive PCC from flooring retailers (via private business arrangements) and public drop-off sites. They sort the collected PCC by fiber type, bale similar materials, and sell or transfer the carpet to processors, which recycle the materials in their facilities. Tier 1 processors receive whole carpet either directly from generators via their own privately contracted collection system or from independent CSEs. Processors may be located within or outside of California but must use California-generated PCC to participate in the Program.

Processors produce various “recycled output” materials, such as carpet fibers and postconsumer carpet calcium carbonate (PC4) from broadloom carpet backing or PVC backing from carpet tiles, which can then be used as feedstock for new recycled products manufactured by Tier 2 manufacturers. CARE works both inside and outside of California to develop markets for new and existing PCC-content products. Only California-generated PCC is eligible for subsidies under the Program. No subsidies are paid for processing or Tier 2 manufacturing outside of the United States.

Since there are several different face fiber types (polymers), backing systems, construction styles and installation protocols, some PCC is more easily recycled versus others. For example, residential broadloom PCC is highly prized for a variety of reasons. Commercial glued-down broadloom is least desired. Many types of carpet tile, due to construction, installation or backing type, are not recyclable. All carpet tiles have the potential for easy reuse, although reuse has been very limited.

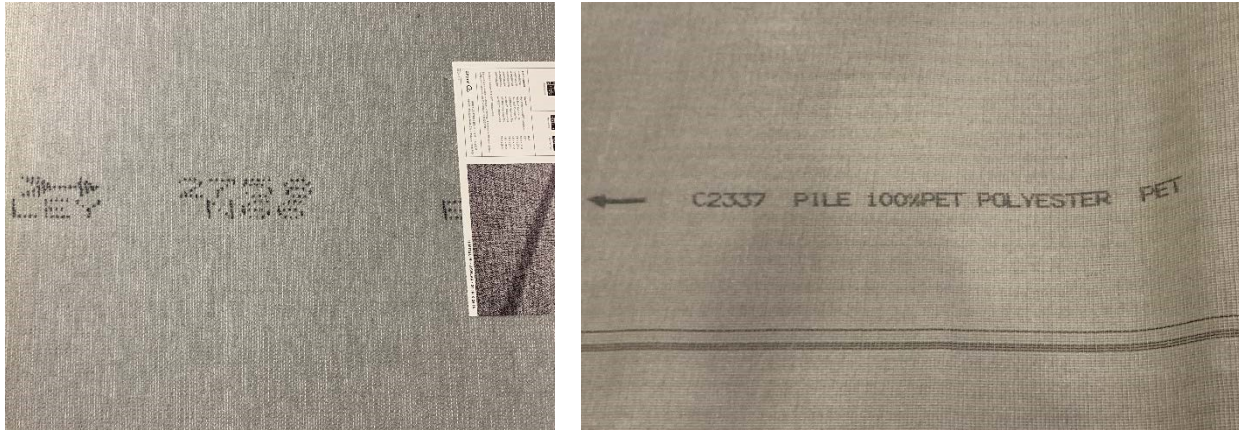
Currently, most carpets are not easily identifiable visually. Sorting is done by hand, using a specialized infrared device supplied by Axsun or Thermo-Fisher, which identifies the face fiber material type. Fiber types include nylon 6, nylon 6,6, polyethylene terephthalate (PET), polytrimethylene terephthalate (PTT), polypropylene (PP), mixed fibers, and natural fibers (such as wool).

The carpet identification process has been partially streamlined with the addition of an industry-funded back label on carpeting, which was initiated with a goal of full adoption by the end of 2016. As of the end of 2019, this effort continues under leadership of Carpet & Rug Institute (CRI). Quantitative updated information on the precise implementation of back stamping has continued to be difficult to obtain. At this time, the status on back stamping has not changed much. Seven of the top 10 mills (selling approximately 94% of all carpet sold in California in 2018) have stated that they have implemented back-stamping on residential goods, and 5 of the top 10 mills have implemented the labeling on commercial carpet. General observations have shown that some challenges or delays in backstamping have related to acquisitions, mill size (small), overseas carpet production (no control/requirement), backing challenge and/or ink transfer to face fiber. CARE continues to work through Aprio to gather further details through ongoing annual mill surveys, and solicitation of CSE feedback. Realistically, it may take a decade or more for back-stamping to affect the PCC recycling stream in a major way, but this is an important step toward improving polymer identification in the

4. Program Outline: Collection & Recycling Sites

future and thus facilitating more cost-effective long-term recyclability. It can be noted that several recyclers are experiencing a growing percentage of PCC coming in with back stamps for face fiber. Similarly, through use of hand analyzers on each piece of PCC, there have been some unique learnings, such as: some single fiber labeled carpets may contain multiple fiber types, while a small number of others are incorrectly labeled. In the end, a once voluntary labeling process may benefit from a more tightly defined process.

Following are two examples of back stamping for nylon 6,6 and PET:



Examples of back-stamping on carpet for nylon 6,6 (left) and PET (right).

Currently, mixed fibers and natural fibers do not have recycle market outlets. Overall market demand for nylon 6,6 remained strong in 2019, however it represents a small and declining fraction of the recycling stream. After several years of declining demand, nylon 6 rebounded in response to the high prices being charged for nylon 6,6 which prompted many users in the injection molding arena to switch to nylon 6. The new pilot subsidy of \$0.10 per pound for Tier 2 nylon 6 recycled product was added in October 2017, increasing demand for nylon 6, and in response to AB 729 Highest Recyclability incentive requirements, an additional \$0.05 subsidy was added to nylon fibers. The Tier 2 subsidy was set based on analysis using the Conversion Cost Model described in the Plan and discussion with recyclers. In late 2018, demand and pricing reached new highs. As anticipated, the introduction of the “highest recyclability” subsidy pricing on nylon fibers (including N6 and N6,6), increased demand for California nylon fibers significantly.

Conversely, generation and demand for non-nylon (PET/PTT and PP) fibers have fluctuated significantly based on initially projected end market demand, despite Program-provided subsidies offsetting the gap between virgin and recycled polymer pricing. A unique downward shift in recycled output for PP is directly related to a significant tradeshow carpet market sector discontinuing California processing arrangements. It has been expressed that tradeshow carpet is primarily shipped to

4. Program Outline: Collection & Recycling Sites

Nevada, sent out by tradeshow contractors for use in California and then returned to tradeshow contractor in Nevada.

The unanticipated sale of a company producing PCC recycled-content PET manufactured lumber resulted in an oversupply of PET PCC starting around the third quarter of 2018. Throughout 2019 at least two new market outlets for PET fiber and pellets were realistically anticipated to begin production; however, one highly qualified end market startup for dimensional lumber was unexpectedly delayed until Q2 2020. Two other outlets for PET fiber and densified pellets were slightly delayed until late Q3 and Q4 respectively. The newly developed long-term contract for densified PET outlet is one that required significant process understanding and approval by CalRecycle and swift grant funding support from CARE in an effort to facilitate capital equipment expansion for 2019 densified pellet production.

Methods for processing whole carpet include a wide range of technical and engineering approaches to mechanically separate the more-valuable face fiber from the backing material. Cleaned and sifted face fiber may be used as a feedstock or combined with other feedstock materials to produce new products. Chemical depolymerization may be used to produce a polymer that can be re-extruded into pellets and then made into new plastic products. However, this is an expensive and energy-intensive process currently limited to nylon 6, and it contributes a very small percentage to overall recycling at this time. Up until 2018, the depolymerization of nylon 6 represented the only closed-loop system available, enabling nylon 6 recycled in this manner to be suitable to go back into carpet products for a second life (carpet-to-carpet, closed-loop recycling).

2018 realized major developments for PET depolymerization. The first such opportunity is for conversion into polyols which go into a variety of urethane applications. While the 2019 volume increased, with the support of CARE grants, capacity was expected to triple in 2020. However, feedstock purity challenge are yet to be resolved for this particular application. CARE has also opened discussions with several PET depolymerization companies in an effort to ensure PCC PET is considered as a major feedback for future operations.

In 2018, Aquafil opened a nylon 6 PCC processing facility in Phoenix and planned to open their new facility in the Sacramento area by second quarter 2019 to process California PCC. Unfortunately, the Camp Fire, one of the deadliest and most destructive wildfires in California history started November 2018 burning over 150,000 acres, destroyed over 19,000 structures and displaced nearly 50,000 people. The sheer magnitude of rebuilding and reestablishment of electrical services had a direct impact on the ability of PG&E to deliver power to the Northern California Aquafil facility. Amid several missed commitments by the utility company and their widely known bankruptcy filing, present startup at 50% of requested power is hoped for in Q3 2020. This will represent more than a full year delay and then delivering only 50% of the requested power. As a result, Aquafil will only be able to operate one of the two planned

processing lines. This start-up delay was a major factor in falling short of the 24% target in Q4 2019. Aquafil was a CARE grant recipient in 2019 to enable this new capacity. Had this facility come online in the second half of 2019 as planned, CARE would have met the 24% recycling rate in Q4.

PC4 can be removed from the backing material and used in new products. This use in new products is as a result of a generous PC4 subsidy of 17 cents per pound (virgin calcium carbonate costs about 1 to 2 cents per pound) which has facilitated investments in sifting equipment to spur ongoing growth in the use of this material in 2019. Other carpet related materials such as latex, glues, unrecyclable backing and face fiber may be diverted via energy recovery or placed in a landfill. Under the Carpet Stewardship Plan 2018–2022, diversion includes carpet material that is reused as-is, processed into a recycled-output feedstock for new products, processed for use in Carpet As Alternative Fuel (CAAF), feedstock for cement kilns, or discards used as a waste-to-energy (WTE) source, or exported. However, in accordance with AB 1158, effective January 1, 2018, no subsidies are paid for kiln or CAAF fuel applications.

The Program has continued aggressive efforts to increase carpet reuse and recycling, divert materials that cannot feasibly be recycled, and reduce the amount of carpet discards sent to California landfills. When whole carpet is shipped outside of the United States for processing, the Program tracks and reports quantities of carpet exported as diverted but is unable to track the precise final disposition of the exported materials at this time. Note, such export pounds of PCC represent less than 0.6% of total diversion. Historically, exports at one time represented up to 3.1% of diversion at 11.2 million pounds in 2014. However, as subsidies are not provided on export PCC, export weights have continued to decline. Additionally, a major exporter located in California also ceased operations in 2018. Over the last three years, exports dropped from 2.7 million pounds in 2017, to 609,031 pounds in 2018, and subsequently to 467,201 pounds in 2019.

4.2 Drop-off & Collection Sites

Post-consumer carpet is collected at two types of sites before being delivered to Collector/Sorters or processors for sorting and processing:

- **Public drop-off sites.** Most public access drop-off sites are sponsored by CARE. These sites are generally established in coordination with local government and/or waste/recycling facility representatives in each county where sites are established. Public drop-off sites are generally placed at traditional disposal locations such as transfer stations, landfills, material recovery facilities (MRFs), or construction and demolition (C&D) recovery facilities. These locations allow installation contractors, do-it-yourself (DIY) individuals, and businesses to drop-off source-separated and properly prepared PCC discards for recycling.

4. Program Outline: Collection & Recycling Sites

A tip fee may be charged by each drop-off location to allow for materials handling cost-recovery, although CARE does encourage sponsored sites to offer reduced tip fees for source-separated carpet to encourage landfill diversion. The Program provides, at no cost to the host facility, signage, collection containers, swap-out service, logistical support, quarterly communications, promotion, education and outreach, as well as transportation of PCC to Collector/Sorters from CARE-sponsored public drop-off sites. See Section 8.2 for information on drop-off site outreach.

- **Private collection sites.** Private collection sites are located at commercial businesses (primarily at carpet retailers, but also commercial distributors and installer supply stores), and they recycle carpet using container pick-up service offered by a collector/sorter or local waste/recycling hauler. These retail flooring businesses provide installation and PCC tear-out services for their customers purchasing new carpet or flooring. Installation contractors may return PCC tear-out to the retailer for recycling. With CARE's shift to an online reporting system, and desire to provide more information for convenient collection analysis, CARE now requires Collector/Sorters to report monthly on the number of sites to which they provide regular ongoing service. Approximately 160 private collection sites were receiving pick-up service statewide as of year-end 2019, which represents an approximate 3% increase in private sites from 2018. Each service provider directly negotiates rates and container service types with each private service site generator of tear-out carpet. Due to collector subsidy support, this container recycling service is generally priced lower than regular disposal services. Recognizing the customized on-site services provided by CSEs, CARE strives to avoid setting up services which compete with their respective private collection networks.
- **Convenient Collection.** As of year-end 2019, CARE estimates there are approximately 277 (204 CSE + 73 CARE) private pick-up service locations and public drop-off sites in California. Preliminary analysis of sites operating at the close of 2019 shows that 99.1% of the state's population lives within a county with access to one or more private or public carpet recycling sites, providing an average of one site per 142,819 people. Thirteen counties have 5 or more sites, six counties have 10 or more sites, and four have more than 20 sites. See Appendix 10.4 for a map of public and private collection sites; this map is a snapshot and will change from time to time with market dynamics.

In 2019, CARE realized unprecedented growth in the number of drop-off sites joining the program as 22 new public drop-off sites were established (see Table 4-1 and Table 4-2), and two sites withdrew from the program, for a net increase of 20 sites. Nine new sites were added in southern California and 13 in northern California (with two sites withdrawing from the program in northern California). By the end of 2019, there were

73 public drop-off sites supporting 50 counties (see Appendix 10.3). Experience has shown, negotiations to establish new drop-off sites can take many, many months (and in a few cases years) to bring to fruition.

**Percent of Population in Counties with One or More
Public or Private Carpet Recycling Sites**
2018 = 97.5%
2019 = 99.1%

Table 4-1. Public Drop-off Site Counts Over Time

Year	Total Drop-off Sites	Counties Served	% Change in Total Drop-off Sites from Prior Year
2012	6	6	N/A
2013	6	6	N/A
2014	14 (+8)	13 (+7)	+133%
2015	23 (+9)	23 (+10)	+64%
2016	33 (+10)	33 (+10)	+43%
2017	44 (+12 -1 = +11)	41 (+9 -1 = +8)	+33%
2018	53 (+11 -2 = +9)	47 (+6)	+20%
2019	73 (+22 -2 = +20)	50 (+8 -5 = +3)	+38%

Table Note: During 2019, two sites withdrew from the program. One due to a facility sale and the other due to a recycling center going out of business.

4. Program Outline: Collection & Recycling Sites

With regard to public drop-off site figures listed in Table 4-1, it should be noted that in 2015 the Program expanded from rural county only sites to a statewide effort, inclusive of both rural and urban counties. Historically, counties such as Colusa, Solano and Sutter were considered serviced, or “covered,” due to their close proximity to drop-off sites in adjacent counties and/or the existence of a Joint Powers Authority between counties. In 2019, CARE requested clarification from CalRecycle on this topic and it was decided that for a county to be considered “covered,” a drop-off site must be located within county boundaries. Therefore, Colusa, Solano, and Sutter counties have been subtracted from the 2019 Counties Serviced figure. However, there may be extenuating circumstances in the future in which a county may be considered serviced without a physical drop-off site within county boundaries (e.g., lack of solid waste facilities and/or retailers). This will be evaluated on a case by case basis and respective local government staff will be consulted in conjunction with jurisdictional confirmation to CalRecycle. In addition, two counties left the Program: one (Sonoma County) was due to facility sale and one (Nevada County) was due to the facility going out of business. Thus, the subtraction of five counties noted in Table 4-1 reflects three counties that have joint agencies for solid waste and two counties in which sites withdrew. Each of these counties is being focused on in 2020.



CARE Drop-off Site staff in front of trailer with carpet for recycling.

Throughout 2019, CARE worked to promote Program drop-off sites with local governments, solid waste task force groups, waste agencies, and disposal site operators in counties where public drop-off facilities have not yet been established, with a goal of establishing a minimum of one public drop-off site in each county. CARE staff targeted disposal and recycling facilities throughout the state, conducting outreach to numerous locations with approximately 30 site visits to potential sites in 14 counties. CARE staff gave four in-person presentations to an estimated 40 local government recycling staff and had 31 in-person meetings with local government recycling staff and/or waste task forces to help spread awareness, outline the CARE program, and connect with potential drop-off locations. The program was further promoted via monthly program e-news and continued collaboration with stakeholder groups such as Rural County Representatives of California (RCRC), as well as engagement opportunities via various statewide and regional conferences and workshops. At the end of 2019, a public drop-off site was established in 85% of California counties, and staff remained in ongoing active discussion with 13 potential facilities in 10 counties. Some county efforts

have been adversely impacted by fire and/or rain events that divert attention to higher priority and urgent needs.

4.2.1 Collection Events Pilot Effort

In 2019, CARE participated in two collection events in counties where public sites had not yet been established (Merced and Nevada Counties) as a pilot effort in assessing volume recovery. While several other stewardship programs have realized varying degrees of success through collection events as consumers may tend to hold on to/store items (e.g., paint, batteries, electronics, etc.), CARE's event expectations were quite measured as surveys from CARE's 2019 Convenient Collection Study revealed the vast majority of carpet rip-out is handled by flooring professionals and contractors.



CARE Senior Associate Lisa Mekis hosting a Rural County carpet recycling collection event.

CARE partnered with local jurisdictions and their respective waste haulers through participation in pre-promotion efforts and sent their Outreach Team to the area in advance as part of an effort to solicit carpet from flooring contractors as a means of helping to secure materials for time and effort invested. The Merced County Event in Los Banos resulted in approximately 4,000 pounds of carpet and the Nevada County Event in Grass Valley resulted in approximately 5,000 pounds. Despite the small volumes captured, CARE's bigger picture goal for event outcome was to garner connections for the establishment of a permanent drop-off site. Subsequently, drop-off sites were established in both counties, with Nevada County later withdrawing from the program due to the facility going out of business. Additionally, in an effort to provide the best attention and focus on understanding the needs of rural counties, CARE expanded their California Team by contracting with long-time, and well respected, Rural Counties

4. Program Outline: Collection & Recycling Sites

Representatives of California staffer Mary Pitto. As of year-end 2019, five of eight remaining rural counties had committed to establishing drop-off sites in 2020.

The CARE Drop-off Site Program grew to a total number of 73 drop-off sites serving 50 counties in 2019. Participating drop-off sites oversee their daily operations, while CARE provides no-cost collection containers, swap-out service, technical assistance, promotional support, and transportation of PCC to processors. For the no-cost service, sites are required to submit Quarterly Reports and attend Quarterly Drop-off Site Webinars where best practices, CARE updates, and troubleshooting common issues are discussed. In 2019, a total of 224 people attended the quarterly webinars, and CARE received 229 quarterly reports.

CARE manages the dispatch of third-party haulers to pick up PCC from CARE-sponsored drop-off sites and coordinates the delivery of materials to Collector/Sorters. In 2019, the Program handled 504 container swap service requests (pulls of full containers) with third-party haulers.

The number of container swap service requests increased 21%, and the pounds of collected carpet increased 29% in 2019. A growing Drop-off Site Program requires expanding technical assistance, support, and communications to the drop-off sites. CARE staff provided ongoing technical assistance to existing sites through troubleshooting support (in the form of regular calls and emails), 42 in-person site visits, and 7 program refresher trainings. Individual outreach is conducted to every drop-off site on a quarterly basis to build consistent feedback systems and reliable drop-off site operations. To improve efficiency for technical assistance, CARE plans to develop a consolidated webpage resource for ongoing reference by drop-off sites.

Table 4-2. New Public Drop-off Sites Brought Online in 2019

#	County	City	Facility Name
1	Shasta	Igo	City of Redding West Central Landfill
2	Alameda	Hayward	Hayward Transfer Station
3	Lassen	Susanville	Zaengles Carpet One Floor and Home
4	San Diego	Chula Vista	Otay Landfill
5	San Diego	San Marcos	EDCO San Marcos C&D Processing Facility
6	San Diego	Lemon Grove	SANCO Resource & Recovery
7	Tuolumne	Sonora	Sonora Recycling
8	Solano	Vacaville, Hay Rd	Recology Hay Rd
9	Solano	Vacaville, Davis St	Recology Vacaville
10	Los Angeles	Signal Hill	EDCO Recycling & Transfer
11	Monterey	Marina	Monterey Regional Waste Management District
12	Los Angeles	City of Industry	Grand Central Recycling and Transfer
13	Stanislaus	Modesto	The Tin Yard
14	Sacramento	Sacramento	L&D Landfill
15	Los Angeles	Pomona	Pomona Valley Transfer Station
16	Nevada	Grass Valley	Grass Valley Recycle (<i>now closed</i>)
17	Glenn	Artois	Glenn County Transfer Station
18	Merced	Merced	Highway 59 Landfill
19	Alameda	Berkeley	Berkeley Transfer Station
20	Los Angeles	South Gate	Interior Removal Specialist, Inc.
21	Orange	Anaheim	Anaheim Transfer Station/Recycling Facility
22	Placer	Lincoln	Nortech Waste

As in previous years, internal service systems were developed and improved further in 2019, including consolidated hauling services, refined data management protocols, and simplified dispatching processes. CARE completed the consolidation of hauling services to one main hauler for the majority of drop-off sites, offering both trailer and cargo container service. The hauler transition was initiated in Q4 2018 and completed in Q1

2019, and helped streamline operations, increase cost savings, and aid with program expansion. Hauling cost savings to CARE for cargo container service was approximately 50%.

Consolidating hauling services afforded CARE a hauling cost savings on cargo container service of approximately 50%.

The Program's online California drop-off site map gives flooring professionals, contractors and the public an easy, interactive way to find active drop-off sites for their used carpet and is also available as a PDF for download (see Appendix 10.3). The map includes site-specific data, such as the site address, hours, and, in some instances, carpet recycling fees. The map is updated regularly and promoted via digital, print, and in-person communications.

Program metrics and highlights for CARE public drop-off sites in 2019 include:

- 22 drop-off sites were added while two were discontinued, a 38% net increase from the number of sites in 2018. Regarding the two sites that were discontinued: one (Sonoma County) was due to facility sale and one (Nevada County) was due to the facility going out of business.
- Approximately 10.2 million pounds of carpet were collected in 2019, a 29% increase over the 7.9 million pounds collected in 2018.
- Total costs (hauling + storage + carpet recycling fees) were \$1,003,066 in 2019 (up from \$930,447 in 2018), a 7.8% increase on a 29% increase in weight collected.
- The overall average cost per pound collected remained relatively constant at \$0.10 per pound. Average cost per pound is more than two times greater for rural versus urban sites.

Increased PCC weight collection by 29%, with only a 7.8% increase in costs due to hauling consolidation and cost-effective self-hauling by some Drop-off Site locations.

4. Program Outline: Collection & Recycling Sites

- Consolidation to one primary hauler offering both trailer and cargo container service represented an approximate 50% hauling cost savings for cargo container service. In addition, this has allowed the Program to expand cargo container service significantly for new drop-off sites.
- Updated education and outreach materials (see Chapter 8).
- 4 Drop-off Site Quarterly Webinars conducted with a total of 224 people in attendance.
- In 2019, 87.6% of all gross collections were collected by Collector/Sorters through private collection sites, while 12.4% were collected through CARE public drop-off sites. Historically over 90% of Program gross collections were captured by Collector/Sorters through private collection sites; however, between CARE's targeted Regional Approach efforts and significant increase in number of drop-off sites established public site collections accounted for a greater percentage.

4.2.2 Major Learnings

2019 saw the Program's largest annual increase in number of drop-off sites established throughout the State. While CARE staff still encountered many of the same barriers to bringing on drop-off sites (i.e., limited labor and/or resources at facilities, spatial constraints, staff turnover, facility sales, disrupting and/or extreme weather conditions, etc.), there were several factors that were different in 2019 than in prior years. The following lists the main factors that contributed to CARE's ability to establish drop-off sites in 2019:

- CARE was operating under an approved 5-Year Plan. In previous years, facility and local government staff expressed uncertainty around the future of CARE as the designated Carpet Stewardship Organization and were reluctant to commit or join the Program until a Plan was approved. Being able to provide long-term Program security aided in CARE staff's discussions with prospective drop-off site staff.
- The consolidation of hauling services to one main hauler allowed CARE to expand cargo container service significantly. The previous hauler was not able to expand this service due to their limited size. Cargo container service utilizes on-the-ground containers that drop-off site staff can simply walk into in order to load PCC. Conversely, trailer service involves site staff loading PCC into a raised container (stationed on wheels). While trailers work well when a ramp, stairs, or loading dock is available, cargo container service is preferred by sites without those amenities. Depending on the facility's operational layout and practices, cargo containers can provide significant labor savings. In addition, both 20- and

40-foot cargo container options are available, which can aid with facility spatial constraints.

- Market demand for products containing PCC (both PET and Nylon) grew significantly in 2019. This demand allowed both private CSE service-providers and CARE staff to focus on establishing collection points without having to balance gross collections with a limited end market pull-through demand.
- In advancing efforts to expand Drop-off Site collections, facilitate on-site collections via local haulers for small to medium retailers, while simultaneously supporting CSEs in their private collection efforts the new operational objective in moving PCC through to Processors has become a focus on “Grow the Pie”. As CARE stakeholders believe roughly 95% of the significantly large volume “low hanging fruit” generators (trailer load quantities) have been captured, the focus and incentivization needs to be on the next tier of generators and creative efforts to capture new (previously landfilled) PCC rather than all competing for the same small pool of generators.

4.2.3 Benefits of Drop-off Site Participation

The Program established and has supported public drop-off sites since 2012. Participants regularly report that the Drop-off Site Program operates smoothly. CARE-sponsored drop-off sites report the following benefits of participating in the Program:

- Convenient collection facility for flooring professionals, contractors and residents in their county/region.
- Alignment with local and statewide recycling and diversion goals; the Program supports local governments and waste facilities/haulers in meeting mandated waste diversion requirements (AB 939, AB 341) and zero waste goals by offering diversion of bulky, carpet discards that would otherwise be sent to landfill.
- Free collection containers for, and transport of, discarded carpet, as well as tip fees paid for by the Program at the carpet recycling destination facility.
- Educational materials, site-customized flyers and signage to promote the drop-off location, procedures for proper preparation.
- Inclusion on the drop-off site map on the CARE website, including location, site hours and other facility details.
- Access to customizable templates for social media, PSAs, press releases, and newsletter articles for added promotion. In both English and Spanish.
- In-person education and outreach to retailers and installers within proximity of the drop-off site.

- Ongoing and in-depth technical assistance by CARE staff, quarterly webinars, sharing best practices, and regular drop-off site engagements.
- Sites are permitted to charge and collect tip fees for carpet to help assure their facility and handling costs are adequately covered; although, sites are strongly encouraged to offer a reduced rate for carpet when it is clean, debris-free source-separated material affording the facility/jurisdiction quantifiable diversion.

4.3 Regional Approach

In 2017, the CARE team began a Regional Approach effort to test the effectiveness of a more targeted and cohesive, multi-touch strategy to educate and learn from various stakeholder groups within a geographic area, with a goal of improving collection, recycling, and awareness of carpet recycling opportunities. Two regions were selected, one each in northern and southern California using the following primary criteria:

- An established CARE drop-off site willing to be involved in the regional efforts (i.e. participate in a specialized collection and drop-off activities and reporting, ability to haul containers, etc.).
- Proximity to a carpet recycling processor (existing and/or originally scheduled to open in 2019).
- Manageable geographic area with sufficient opportunities to increase PCC collection and launch public education and outreach campaigns.
- Ample presence of carpet retailers and installer supply stores.

The following areas were chosen:

- **Los Angeles Area:** Focused on 30 miles radius surrounding American Reclamation (CARE drop-off site) and areas serviced by American Reclamation, concentrated in the communities of Burbank, Glendale, and portions of Los Angeles. In 2019, this area was expanded to include additional drop-off sites in Los Angeles County. Processor Los Angeles Fiber is located within the area covered.
- **Greater Sacramento Area:** Focused in Sacramento County and portions of surrounding counties. Including Yolo, Solano, San Joaquin, El Dorado, and Placer Counties. Processor Circular Polymers is located within the area covered, as well as proposed processor Aquafil.

In mid-2019 the greater San Diego region was added to the Regional Approach effort. During Phase I for San Diego, CARE focused on efforts to add Drop-off Sites in areas where there were concentrated number of retailers, C&D recycling facilities, solid waste facilities and promotion of an existing Collector/Sorter. Phase II anticipated in 2020 will include fill-in siting in key regional areas as well as region-wide broadcast on carpet recycling.

4.3.1 Regional Approach Highlights

The Regional Approach efforts have resulted in key learnings and has shown that a targeted, multiple approach strategy involving various stakeholder groups allows a region to adopt carpet recycling in its own unique way. In each Regional Approach area CARE utilizes several program offerings with a goal of improving convenient collection, increasing collection pounds, and raising awareness of carpet recycling for retailers, installers, waste facilities, haulers, local government, and the public. The following are highlights from each Regional Approach area:

Greater Sacramento Area

- 10 public drop-off sites established in Greater Sacramento Area, 4 new in 2019:
 - El Dorado County, El Dorado Disposal/Waste Connections
 - Sacramento County, Florin Perkins Public Disposal
 - Sacramento County, Kiefer Landfill
 - Sacramento County, L&D Landfill
 - Sacramento County, North Area Recovery Station,
 - Solano County, Recology Hay Road
 - Solano County, Recology Vacaville (Davis Street)
 - San Joaquin County, North County Recycling Center
 - Placer County, Western Placer Waste Management Authority
 - Yolo County, Yolo County Landfill

Figure 4-1. Sample Flyer Promoting Carpet Recycling in Sacramento Area

Recycle Carpet in the Greater Sacramento Area!

The sites below accept carpet for recycling in the Greater Sacramento Area.

<p>1 El Dorado Disposal/Waste Connections 4100 Throwita Way Placerville 530-295-2808</p> <p>2 Florin Perkins Public Disposal 4201 Florin Perkins Rd. Sacramento 916-443-5120</p> <p>3 Kiefer Landfill 12701 Kiefer Blvd. Sloughhouse 916-875-5555</p> <p>4 L&D Landfill 8635 Fruitridge Rd. Sacramento 916-383-9420</p>	<p>5 North Area Recovery Station 4450 Roseville Rd. North Highlands 916-876-9446</p> <p>6 Recology Hay Road 6426 Hay Rd. Vacaville 707-678-4718</p> <p>7 Recology Vacaville Solano Recycling Facility 855 1/2 Davis St. Vacaville 707-448-2945</p> <p>8 North County Recycling Center 17720 East Harney Ln. Lodi 209-887-3868</p>
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9 Western Placer Waste Management Authority
3195 Athens Ave.
Lincoln
916-543-3960

10 Yolo County Central Landfill
44090 County Rd. 28H
Woodland
Tel. 530-666-8727

To see hours and rates, visit CarpetRecovery.org/CA. 05-20

- Facilitated establishment of new Recycling Pick-up Service for small to medium sized retailers. CARE partnered with three regional hauling services to provide on-site carpet recycling collection service for small to medium sized retail stores. In an effort to further encourage support for new on-site service CARE twice offered a \$500 incentive to each retailer willing to adopt the recycling pick-up service, with a minimum 1-year contract requirement. Despite enthusiasm and high interest in the incentive, no retailers chose to take advantage of the offer. CARE support of the collection service effort included offering and awarding of micro-grants to all three local haulers in 2018–2019 to increase the number of their closed-top containers.
- Education and outreach effort promoting public drop-off sites, recycling pick-up service, and general awareness targeted toward retailers, installers, local government, and the general public. Included in the effort were site visits to every carpet retail store in the region, educational tabling at installer supply houses and home and garden shows, as well as a coordinated newspaper and billboard campaign. See Chapter 8.

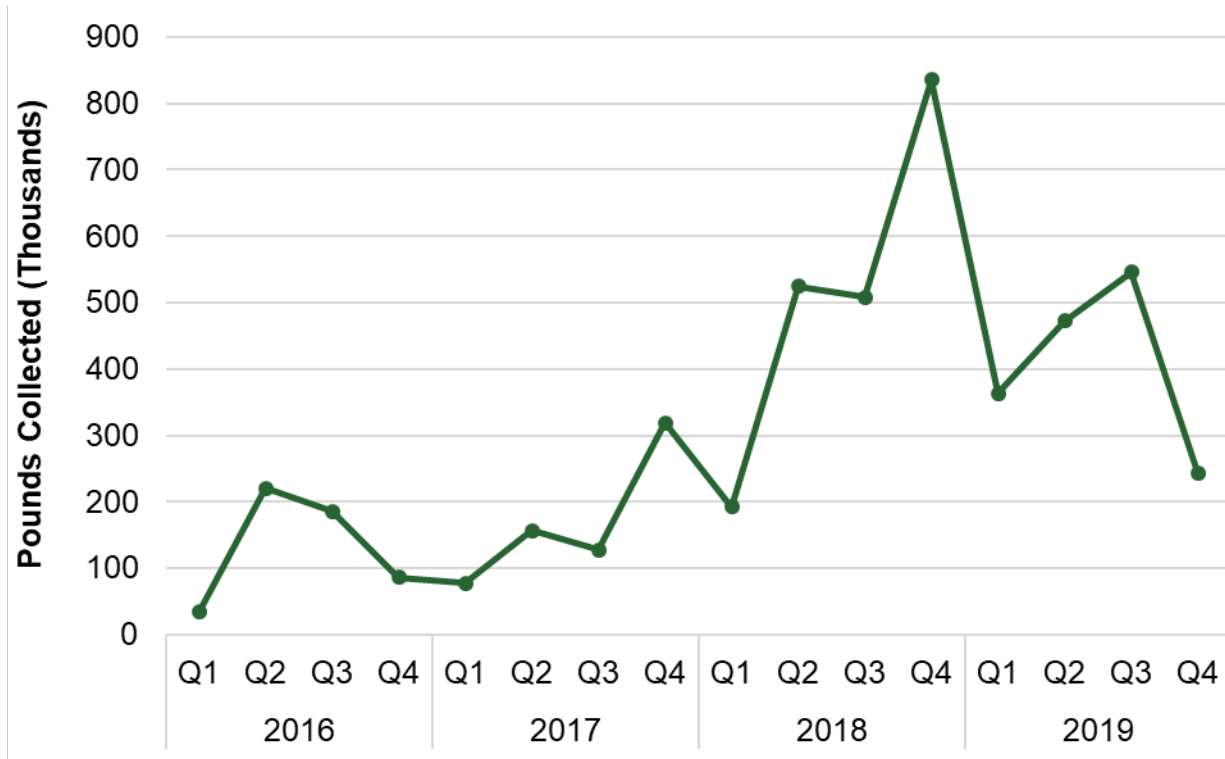
Regional Grant Funding to Support Collection & Capacity

Collections: Florin Perkins, Atlas Disposal, Moto Transport
Capacity: Aquafil #2, Circular Polymers



Carpet recycling billboard in Sacramento.

Figure 4-2. Northern California Regional Approaches Drop-off Site Pounds Collected, 2016–2019 (Quarterly)



The 10 drop-off sites in the region saw a 19.5% decrease in annual gross collected pounds in 2019 compared to 2018, and a 143.6% increase compared to 2017. While it is not fully known why the PCC pounds collected dropped off despite the addition of four new sites, one known contributing factor is that the Florin Perkins site, represented as site 2 in the map above, did establish a separate and independent collection for carpet pad in Q4 2018. Carpet pad had previously been included in CARE trailers from this site. The Florin Perkins drop-off site saw a 34.2% decrease in annual gross collected pounds in 2019 compared to 2018, and a 149.2% increase compared to 2017. Additionally, with grant funded support for the expansion of private on-site collection services, it is presumed that some PCC is now being collected by local haulers and delivered to the collector/sorter Circular Polymers.

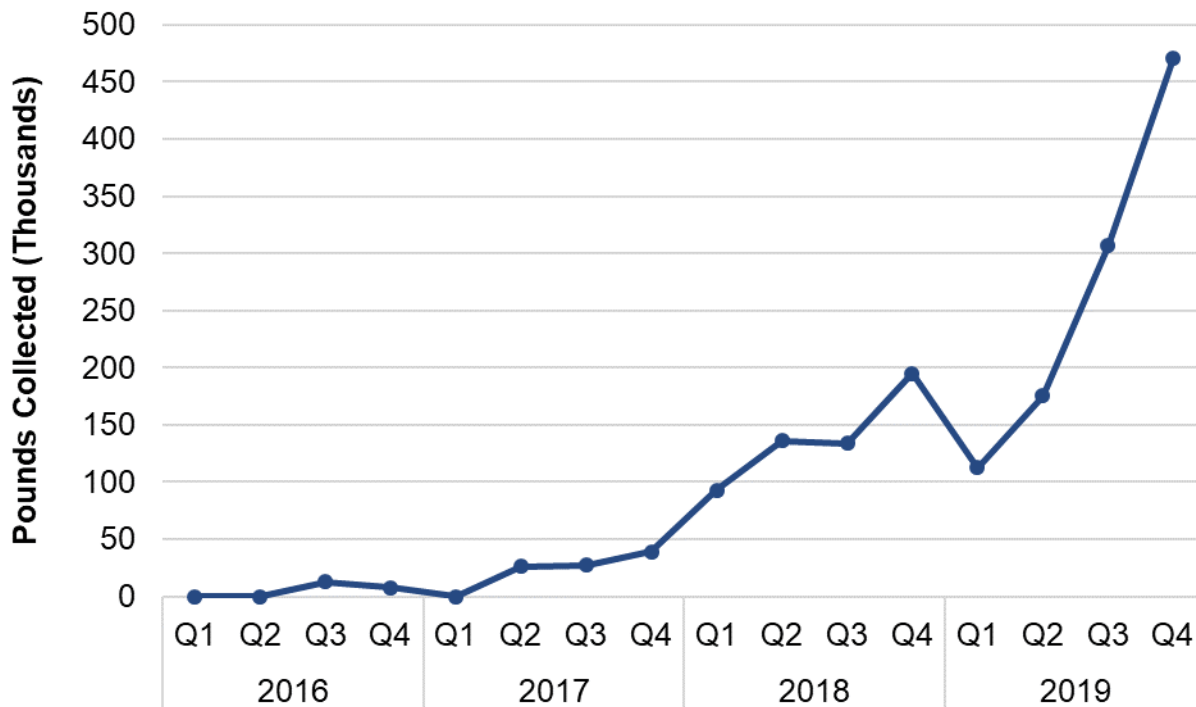
Los Angeles Area

As the Los Angeles area has had extensive larger volume generator private collection coverage for many years, the initial Southern California Regional Approach was originally very narrowly focused. Here the approach goal focused on increasing pounds via onsite carpet recycling service for interested small and medium sized retailers that were not already being serviced by a Collector/Sorter. As a point of reference, at year end 2018 there were 23 reported private collection sites while at year end 2019 there are now 47 private collection sites. While CARE's small to

medium volume generator service focus continued in 2019, the region was expanded to include the 4 newly established Los Angeles-area drop-off sites (EDCO Recycling & Transfer, Grand Central Recycling and Transfer, Pomona Valley Transfer Station, and Interior Removal Specialist, Inc./Construction Demolition Recycling).

- By the end of 2019, American Reclamation maintained 6 accounts with onsite carpet recycling service.
- The American Reclamation drop-off site saw a 4.0% increase in annual gross collected pounds in 2019 compared to 2018, and a 525.6% increase compared to 2017. In addition, the site maintained a 45% reduction in its tip fee (carpet drop-off fee) for source separated carpet.
- The tonnage from discrete drop-offs of clean, source-separated carpet at American Reclamation increased 23.2 in 2019 compared to 2018 (from 263 to 324 tons).
- Four additional drop-off sites were added in the Los Angeles region during 2019, with that the 5 drop-off sites in the region saw a 97.9% increase in annual gross collected pounds in 2019 compared to 2018, and a 1090.2% increase compared to 2017.

Figure 4-3. Southern California Regional Approaches Drop-off Site Pounds Collected, 2016–2019 (Quarterly)



San Diego Area

CARE determined that the San Diego County Area will need 6 strategically located public access drop-off sites to serve the region. During 2019 three CARE drop-off sites were established in the North, East and South County regions of San Diego County, adding to the existing Planet Recycling location in Chula Vista.

- 3 public drop-off sites established in San Diego County, in 2019.
 - EDCO C&D Processing Facility, San Marcos
 - SANCO Resource Recovery, La Mesa
 - Otay Landfill, Chula Vista

Figure 4-4. Sample Flyer Promoting Carpet Recycling in San Diego Area

Recycle Carpet in San Diego County!

The sites below accept carpet for recycling in San Diego County:

- 1 Planet Recycling**
187 Mace Street, Chula Vista.
Tel. 619-424-7545
- 2 Otay Landfill**
1700 Maxwell Road, Chula Vista.
Tel. 619-421-3773
- 3 SANCO Resource Recovery**
6750 Federal Blvd, Lemon Grove.
Tel. 619-287-7555
- 4 EDCO San Marcos Construction Demolition Processing Facility**
224 South Las Posas Road, San Marcos.
Tel. 760-744-2700

California Carpet Stewardship Program
An Initiative of CARE: Carpet America Recovery Effort

To see hours and rates, visit CarpetRecovery.org/CA.

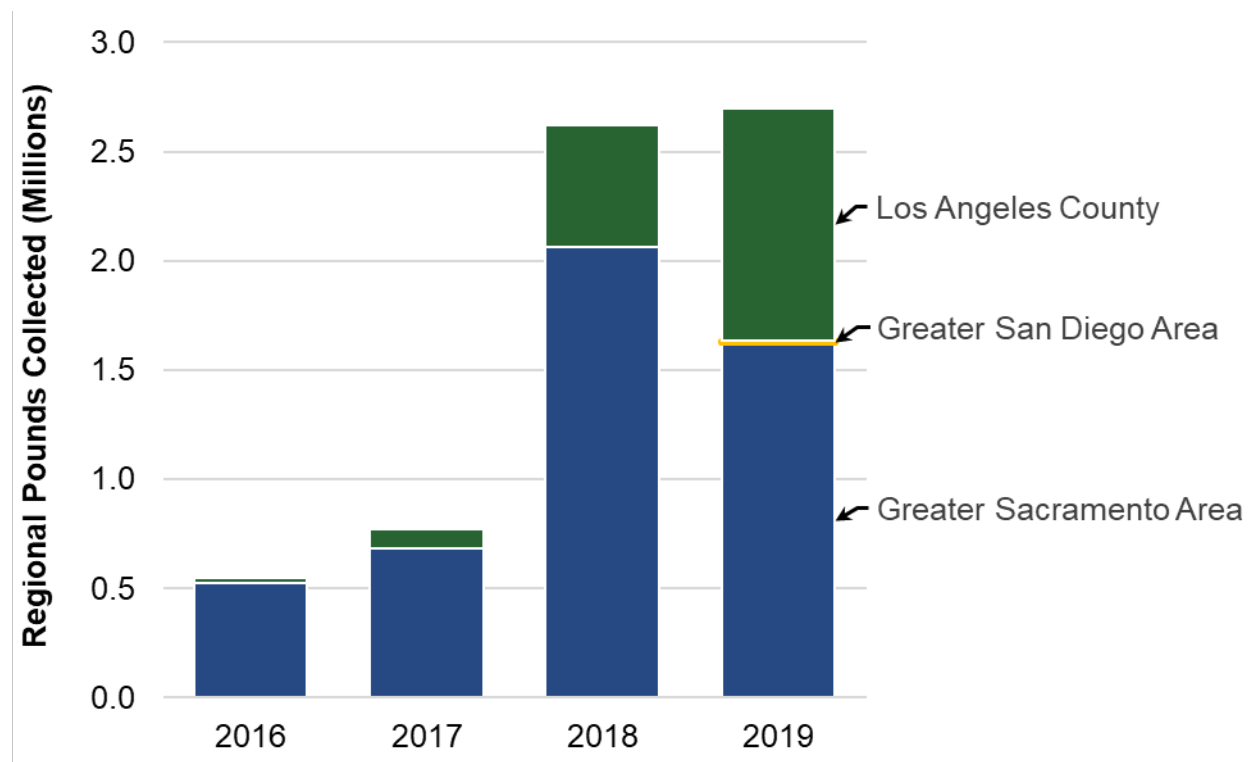
04-19

The San Diego Region effort is a phased approach, following in partnership with the local CSE. Phase I involved drop-off site recruitment and targeted outreach (see Chapter 8) to retailers and installers located in proximity to the drop-off sites. Drop-off site recruitment has involved over two years of effort which included outreach to major solid waste haulers, regional recyclers and a jurisdiction who either own or operate Material Recovery Facilities, Transfer Stations and/or Landfills. Phase II, to be carried out in close partnership with the local CSE will involve expanded retailer/installer outreach in conjunction with 1-3 anticipated new drop-off sites, comprehensive local

government outreach and broader consumer outreach through regionally well-established zero waste, reuse and recycling outlets.

Collectively, through the three targeted regional approach effort has afforded the program the opportunity to test and evaluate various methods of engagement, support and promotion to effectuate an increase in the convenience and collection of carpet from flooring professionals, contractors and the general public. Figure 4-5 reflects the year over year growth from efforts of the three aforementioned regions, resulting in over 6.6 million pounds of carpet recovery from 2016 to 2019. Growth in recovery from 2016 to 2017 was 42%, from 2017 to 2018 an exponential 238% increase and a steady build upon that of 3% from 2018 to 2019.

Figure 4-5. Regional Approach Drop-off Site Pounds Collected, 2016–2019



4.4 Collector/Sorters (CSEs)

Collector/Sorters or CSEs are a valuable and important participant in the carpet recycling process. These entities collect used carpet and sort it by fiber type in preparation to sell/transfer to processors, who then recycle the material into usable recycled output. CSEs collect used carpet in three ways, generally as a fee for service: 1) CSEs may place a trailer or container at a drop-off site; 2) CSEs may accept carpet drop-offs at their warehouses; 3) CSEs may provide pick-up service from a private drop-off site, such as a retailer or other flooring professional. CSEs operate in what is referred to as a private collection network which is responsible for approximately 87% of

4. Program Outline: Collection & Recycling Sites

carpet collection. In addition to their private collection network, CSEs may also accept CARE public site trailers as a source of PCC.

In 2017, CSEs were eligible for two types of subsidies:

- CSE (Whole Carpet Sorted/Shipped/Sold) Subsidy: \$0.02 per pound for carpet that is sorted, sold, and shipped
- Reuse Subsidy (Carpet Tile/Broadloom): \$0.10 per pound for materials shipped and sold/donated

Beginning in 2018 and continuing through 2019, CSEs have been eligible for an additional subsidy which is intended to grow tile reuse and recycling:

- CSE Carpet Tile Collection Subsidy: \$0.05 per pound for carpet that is sorted, sold/donated, and shipped for reuse or recycling (effective January 1, 2018)

Eleven CSEs were registered to participate in the California Program during 2019, up from nine in 2018 (see Table 4-3). Seven participating CSEs also function as Tier 1 processors. It should be noted that pure CSEs, those who only function as a collector/sorter and provided no further processing, still receive a legacy monthly reporting subsidy of \$1,000.

Table 4-3. Collector/Sorters Requesting and Receiving Funding During 2019

#	Company	City	State	Q1	Q2	Q3	Q4
1	Circular Polymers	Lincoln	CA	Y	Y	Y	Y
2	Construction & Demolition Recycling, Inc. (CDR, Inc.)	South Gate	CA	Y	Y	Y	Y
3	GISCA	Palm Springs	CA	N/A	Y	N	N
4	Gone Green Recycling	Reno	NV	Y	Y	Y	Y
5	GreenWaste Carpet Recycling	San Jose	CA	Y	Y	Y	Y
6	Interface, Inc.	Atlanta	GA	Y	N	Y	Y
7	Los Angeles Fiber Co. (LA Fiber)	Vernon	CA	Y	Y	Y	Y
8	Planet Recycling	Chula Vista	CA	Y	Y	Y	Y
9	Shaw Industries Group, Inc.	Dalton	GA	Y	Y	Y	Y
10	Tarkett USA	Dalton	GA	N	Y	Y	Y
11	Upstream Textiles	Placentia	CA	Y	Y	Y	Y

Table Note: Participants reflecting N/A denotes they were not an active participant during the time period shown.

In 2019, the Program paid out \$1.43 million to CSEs as subsidies, down slightly from \$1.48 million in 2018, representing a 3% decrease (see Figure 4-6). A portion of the decline relates to a decrease in whole carpet shipped and minor decrease in broadloom reuse.

Figure 4-6. Collector/Sorter (CSE) Payouts Over Time

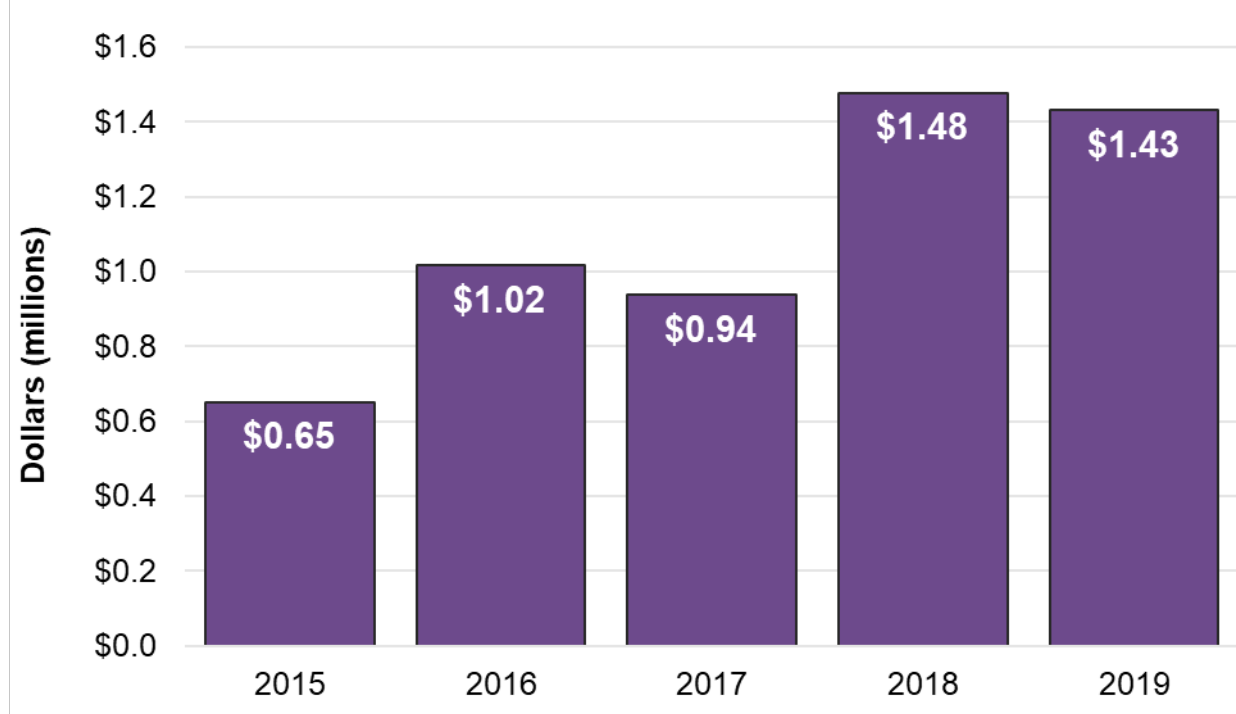


Figure Note: In the CSE payouts history, 2015 only reflects Q3 and Q4 as collection subsidies were initiated in 2015. Of the 2018 increase shown, a portion was due to a reclassification as Tier 1 Processors who also provided collection services had previously reported separately in a combined report for both their collections and processing. As of 2018, Tier 1 Processors now report separately as a CSE for their collections and as a Processor.

4.4.1 Collector/Sorter Facilities

A list of all public CSEs and their locations is shown above in Table 4-3. Listed facilities are limited to members of the California Program, locations that are participating in the California subsidy program, and those that have specifically coordinated with the California Program to be listed as a drop-off site. Additional privately contracted drop-off sites are available throughout California, but for competitive confidential business reasons, CSEs do not currently release listings of their private drop-off locations. These private sites may include retailers, contract installation services and other flooring professionals. Participating CSE facilities and accepted materials change over time; data maintained on the California Program database is based on the best available data

as reported by the participating facility. CARE does collect private collection site county-level information, but not discrete locations. CSE reporting on number of private collection sites was expanded in the reporting form effective Q1 2018.

Subsidy eligibility requires:

- **Signed agreements.**
- **Membership in Good Standing.**
- **Program reporting.**
- **Agreed Upon Procedures (AUP) review.**
- **Management practices.**
- **Documentation requirements.**

To be considered a qualifying recipient for potential subsidy funding in 2019, CSEs (as well as Tier 1 processors, and Tier 2 manufacturers) are required to be CARE members in good standing and sign an agreement. Under the agreement, qualified recipients are subject to program reporting, Agreed Upon Procedures (AUP) review, management practices, and documentation requirements. Detailed participant onboarding procedures (for CSEs, processors, manufacturers and mills) have remained the same as shown in prior reporting years reports, can be found in a detailed diagram on the CARE website and is readily available upon request from CARE.

4.5 Tier 1 Processors

Tier 1 processors receive source-separated PCC discards and convert material into recycled output to be used in the manufacturing of secondary products. Some Tier 1 processors may also function as Tier 2 manufacturers and/or CSEs. Thirteen processors were registered with the Program in 2019. One processor discontinued operation in 2016 but continues to report inventory each period. One processor was registered in the Program during the period but did not request or receive funds during 2019, and one other processor discontinued as an active processor. Table 4-4 lists participants requesting funds at least once during each reporting quarter, with “Y” green cells indicating “yes” funds were requested and received and “N” red cells indicating that “no” funds were requested or received during the period.

Table 4-4. Tier 1 Processors Receiving Funding in 2019

#	Company	City	State	Q1	Q2	Q3	Q4
1	Aquafil Recycling #1, Inc.	Phoenix	AZ	Y	Y	Y	Y
2	Cedar Plastics [1]	LaGrange	GA	N	Y	N	N
3	Circular Polymers	Lincoln	CA	Y	Y	Y	Y
4	Columbia Recycling Corp.	Dalton	GA	Y	Y	Y	Y
5	GISCA	Palm Springs	CA	N/A	N	Y	N
6	Gold Pond Corp.	Dalton	GA	Y	Y	Y	N
7	Interface, Inc.	Atlanta	GA	Y	N	Y	Y
8	Los Angeles Fiber Co. (LA Fiber)	Vernon	CA	Y	Y	Y	Y
9	Planet Recycling	Phoenix	AZ	N	N	N	Y
10	Shaw Industries Group, Inc.	Dalton	GA	Y	Y	Y	Y
11	Tarkett USA	Dalton	GA	Y	Y	Y	Y
12	Wellman	Johnsonville	SC	N	N	N	Y
13	Wetsel Oviatt Recycling	Elk Grove	CA	N	N	N	N

Table Notes: Participants reflecting N/A denotes they were not an active participant during the time period shown.

[1] Cedar Plastics declared bankruptcy in late 2019 and is now out of business.

Of the thirteen Tier 1 processors registered throughout 2018, three (approximately one quarter) operated facilities within California, while the remaining ten processed California carpet through operations located in other states. Eight Tier 1 processors were active at the beginning 2019, with six actively requesting funds each quarter, and at year-end nine processors were active. Not all processors participated every quarter. At least two California companies operated as both a Tier 1 processor and Tier 2 manufacturer.

In 2019, the Program paid out \$7.49 million to Tier 1 processors as subsidies, up 30% from \$5.74 million in 2018 (see Figure 4-7).

One new processor subsidy change took effect in 2019:

- Highest Recyclability Subsidy: \$0.05 per pound for N6 and N6,6 broadloom and carpet tile (effective January 1, 2019).

Figure 4-7. Tier 1 Processor Payouts Over Time

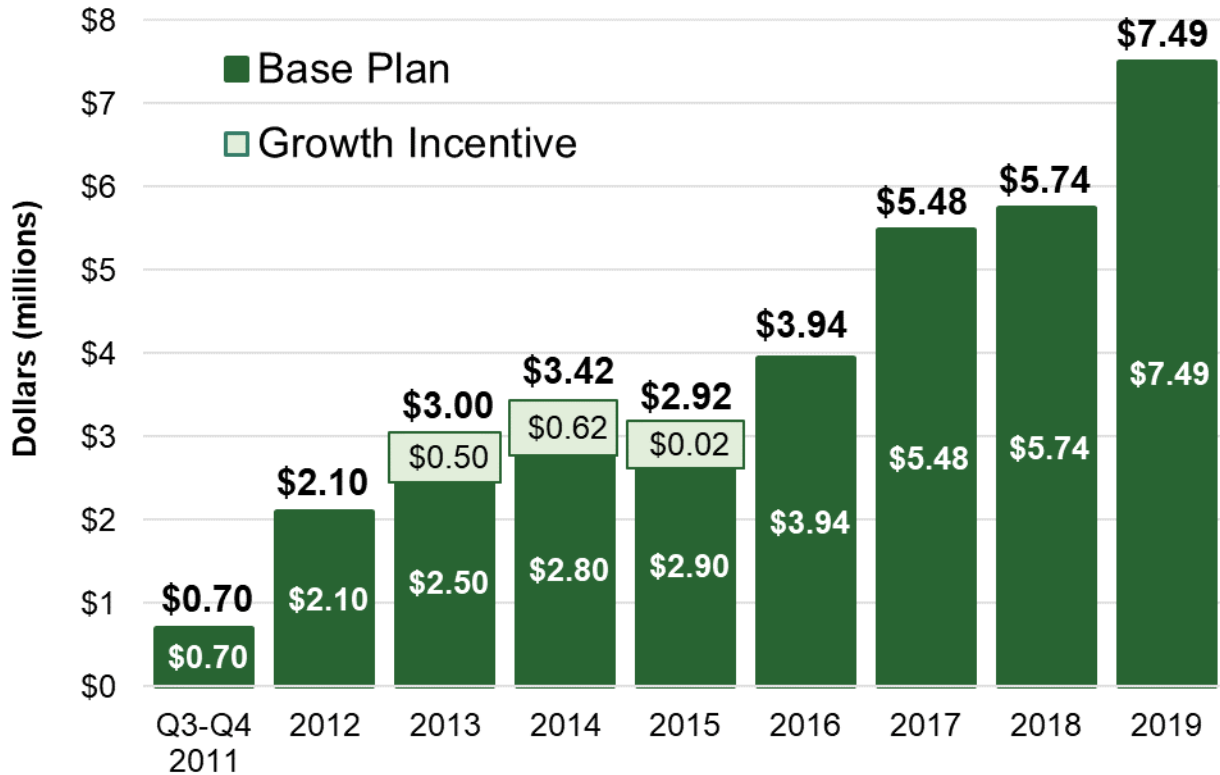


Figure Note: Prior to 2017, in a few cases, minor manual adjustments may have been made to payouts after reports are submitted by participants. Adjustments include, but are not limited to, deductions for late membership fees, self-reported errors, and errors in reporting found through Agreed Upon Procedures (AUPs), and deductions for late membership fees. During 2013–2015, a Growth Incentive was offered in an effort to further incentivize and facilitate the expanded PCC recovery. Finally, as noted previously, in 2018 all CSE pounds were consolidated into the CSE section. Historical data changed slightly for Processors who also collect as a CSE.

4.6 Tier 2 Manufacturers

Used carpet may be recycled to make new carpet or as a feedstock component in the manufacture of other products. Tier 2 manufacturers buy recycled output processed from the carpet fiber or carpet backing and incorporate it into new or existing products. During 2019, there were 20 registered, and 16 active, Tier 2 manufacturers producing a variety of products, including: carpet/carpet tile, carpet cushion/underlayment, building insulation, water heater blankets, bedding, pellets, automotive plastic components, packaging insulation, erosion control products, lightweight aggregate, absorbency products and a variety of cement-related products (see Section 6.4). Table 4-5 lists participants requesting funds at least once during each reporting quarter, with “Y” green

4. Program Outline: Collection & Recycling Sites

cells indicating “yes” funds were requested and received and “N” red cells indicating that “no” funds were requested or received during the period.

Cement-related outlets are specifically tied to use as a raw material to displace virgin limestone. There is no energy recovery associated with PC4 use in cement kilns. CARE does not pay subsidies for kiln applications that use PCC as an alternative fuel in any capacity.

Table 4-5. Tier 2 Manufacturers Receiving Funding in 2019

#	Company	City	State	Q1	Q2	Q3	Q4
1	American Fiber Cushion	Dalton	GA	Y	Y	Y	Y
2	Aquafil Carpet Recycling	Phoenix	AZ	Y	Y	Y	Y
3	Aquafil USA, Inc.	Cartersville	GA	Y	Y	Y	Y
4	Arropol Chemicals	Dalton	GA	N	N	N	N
5	Bonded Logic	Chandler	AZ	Y	Y	Y	Y
6	Cedar Plastics [1]	LaGrange	GA	N	Y	N	N
7	Chasen	Irvington	NJ	Y	Y	Y	Y
8	Circular Polymers	Lincoln	CA	Y	Y	Y	Y
9	Columbia Recycling Corp.	Dalton	GA	Y	Y	Y	Y
10	Fiber Commercial Technologies [2]	Mankato	MN	N	N	N	N
11	GeoHay, LLC	Inman	SC	Y	Y	Y	Y
12	KMI Group	Kenton	TN	N	N	N	N
13	Leggett & Platt	Fort Worth	TX	N/A	N/A	Y	Y
14	Manassas Polymers	Calhoun	GA	N	Y	Y	N
15	MP Global Products LLC	Norfolk	NE	Y	Y	Y	Y
16	Reliance Carpet Cushion	Vernon	CA	Y	Y	Y	Y
17	Shaw Industries Group, Inc.	Dalton	GA	N	N	N	N
18	Sustainable Polymer Systems, LLC	Miramar Beach	FL	Y	Y	Y	Y
19	Wellman	Johnsonville	SC	N	Y	N	Y
20	Wetsel Oviatt Recycling	Elk Grove	CA	N	Y	Y	Y

Table Notes: Participants reflecting N/A denotes they were not an active participant during the time period shown.

[1] Cedar Plastics declared bankruptcy in late 2019 and is now out of business.

[2] Fiber Commercial Technologies was sold, processing of CA PCC materials to begin again in 2020 under new company name of Rise Composite Technologies.

4. Program Outline: Collection & Recycling Sites

Tier 2 manufacturer payouts unexpectedly decreased in 2019 by 1.6% from \$5.72 million in 2018 to \$5.63 million in 2019 (see Figure 4-8). This decrease was unanticipated as a long-planned startup of a former decking lumber manufacturer was slated to begin new production capacity for dimensional lumber by Q3 2019. Unfortunately, due to operational and equipment modification, startup was been delayed for a second time until Q2 2020. While end markets for nylon 6 have been strong, the manufacturer subsidies established in Q4 2017 showed nylon 6 as 2.2% of manufacturer subsidies, increasing to 5.6% in 2018 and 12.4% in 2019. During 2018 manufacturer payouts on nylon were \$322,923 and in 2019 more than doubled to \$852,064, an increase of 163%.

Additional secondary products may use nylon or PC4 as recycled-content feedstock in such products as carpet/carpet tile, rubber mats, ramps/transitions, wheel stops, molded plastics, engineered resins, and use of PC4 as a raw material in cement production but are not or were not previously eligible to receive Tier 2 subsidies and thus are not tracked by the Program. As of October 1, 2017, nylon 6 products using Type 1 recycled output are eligible for Tier 2 manufacturer subsidies. Historically, Tier 2 manufacturers using nylon 6,6 or PC4 were not eligible for Tier 2 manufacturer subsidies. Beginning Q1 2019 CARE established Nylon 6,6 manufacturer subsidies which represented 2.7% of all manufacturer subsidies. Tier 2 manufacturers using PC4 were not eligible for Tier 2 manufacturer subsidies in 2019. Only Processors receive PC4 subsidies.

Two new manufacturer subsidy changes took effect in 2019:

- Tier 2 Manufacturer Nylon 6,6 Subsidy: \$0.10 per pound for Type 1 Nylon 6,6 output used as feedstock in the manufacture of secondary products (effective January 1, 2019)
- Tier 2 Manufacturer PET Pellets Subsidy: \$0.11 per pound for California-generated PET fiber converted into PET Pellets (effective October 1, 2019)

For a summary of all pounds and subsidies paid to Collector/Sorters, Tier 1 processors or Tier 2 manufacturers in 2019, refer to Table 7-1 on page 175.

Figure 4-8. Tier 2 Manufacturer Payouts Over Time

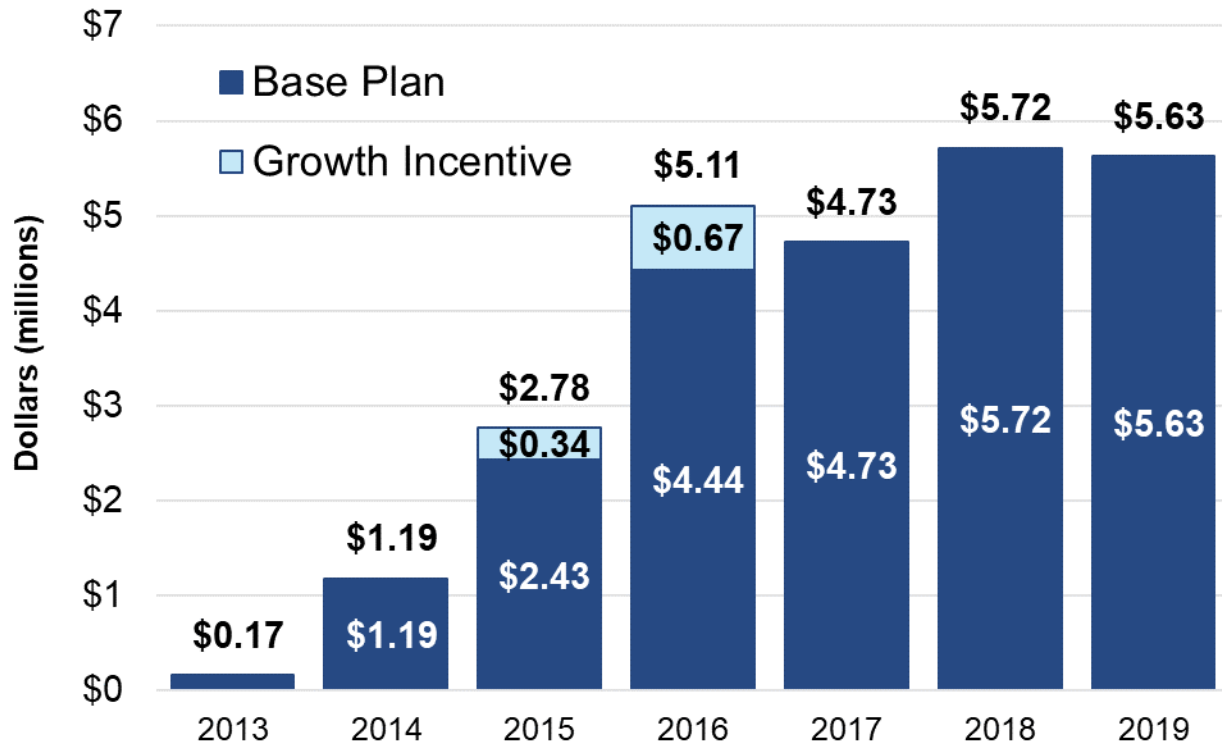


Figure Note: Prior to 2017, in a few cases, minor manual adjustments may have been made to payouts after reports are submitted by participants. Adjustments include, but are not limited to, deductions for late membership fees, self-reported errors, and errors in reporting found through Agreed Upon Procedures (AUPs), and deductions for late membership fees. Any such corrections are considered de minimus and do not change program performance, calculations or financial balance to any material degree. Such corrections are available to auditors, both the CARE independent auditor and the CalRecycle auditors.

4.7 California Recycling Facilities

The Program uses a network of facilities located both in and outside of California, even as it works to increase the in-state capacity for collections, recycling and secondary manufacturing. In 2019, 59% of the total subsidies were paid to California-based operators, up from 49% in 2018. The 2019 balance (41%) was paid to domestic facilities located outside of California. Specific contributing factors for the increase in monies to California-based operators are increased in-state capacity, increased end market demand from in-state processors and a notable decline in out-of-state processing demand. No subsidy funds were paid outside the United States.

In addition to subsidies, grant funds support capital improvements, product testing, recycled product procurement and collection/reuse. California-based projects are given preference under Cycle A (Capital Improvements) and B (Product Testing) grant elements, while applicants to Cycle C (Procurement) and Cycle M (Micro-grants for Collection/Reuse) grant elements are required to be California-based projects. Of the \$2.4 million awarded for 2019–2020 project implementation, 100% was awarded to 7 California-based projects under capital expansion. Under the micro-grant category, approximately \$82,000 was awarded to 6 California-based projects to support increasing or expanding collections and reuse operations.

4.8 International Recycling Facilities

A small amount (234 tons) of whole carpet was reported to CARE as exported outside the United States to international recycling facilities in 2019. For 2019 shipments, these facilities are primarily located in Asia and Australia, although markets fluctuate over time. Due to China National Sword policy implemented in 2017, global markets for recycled commodities, especially plastics, have been widely impacted. While exports of PCC to China have been small, other polymer sources—still backflowing and handled inside the United States due to National Sword—continue to adversely affect the supply and demand for carpet polymers. This will continue to impact demand for recycled commodities moving forward.

The California Program does not provide any support for international recycling facilities and no incentives are paid for PCC processed outside the United States. However, Collector/Sorters are eligible to be compensated, via the \$0.02 per pound collection subsidy, for pounds sold and shipped internationally for recycling. For the purposes of the Program, all reported whole carpet exports are considered diverted from California landfills, although as the final disposition of these materials is unknown, exports are not included within recycled output estimates. Recycled output processed in California or the United States is eligible to receive subsidies; the finished recycled output may be used by domestic or international secondary product manufacturers.

4.9 Capacity

For this report, capacity is defined as the estimated volume of carpet discards that can be processed by participating Tier 1 processors in the marketplace. This measurement is based on self-reported figures and permitted capacity figures. Capacity is generally presented in tons per year (TPY), per the CalRecycle [FacIT](#) definitions.

In 2019, there were 13 processors registered with CARE (see Table 3-3), of which 12 were active and received subsidies. Of those 12, data information from eight processors

are included in the capacity survey evaluation (66%), including both California processors.

The total estimated maximum capacity data reported for all processors is 461.9 million pounds per year (231,000 tons per year), or 152% of 2019 estimated discards of 304 million pounds (152,000 tons). The net reported change in maximum available capacity in 2019 increased 4% from 444.64 million pounds (222,000 tons) in 2018. While California capacity expanded in 2019, aided by CARE grants and capital equipment awards, it was reasonably expected to be even greater. However, Aquafil-Woodland, a proposed new northern California processor that expected to open in June 2019 has been delayed until at least Q3 2020 due to wildfires and utility company bankruptcy. As well, XT Green, a long expected southern California processor has been delayed again due to trade tariffs and utility power supply challenges. Similarly, out-of-state processor capacity at Aquafil's Phoenix facility appears to have been hampered by nearly 50% due to technical processing/equipment line challenges. 2019 did see the introduction of a new tile processing facility located at Planet Recycling in Phoenix, AZ. Originally anticipated for start-up in Q1 or Q2, equipment and operational start-up challenges delayed full processing for recycled output until early Q4 2019.

A number of factors impact the maximum capacity of any given facility. Examples include, but are not be limited to, process(es) employed; utility rates (some facilities must shut down during peak demand to avoid excessive electricity costs); mechanical reliability of processing equipment; receiving space; number of labor shifts per day; type of material processed (residential cut pile broadloom versus commercial cut pile or loop) market dynamics; and other individual business practices.

The maximum capacity estimated in California (based on the two responding California-based processors) is approximately 89 million pounds (44,000 tons), or 29% of 2019 discards, representing a 44% increase from 63 million pounds (31,500 tons) reported in 2018. Had the long-planned Aquafil-Woodland facility opened available California capacity would have increased by an estimated 15-18 million pounds.

**California Capacity Expansion
44%**

**California processor capacity increased
from 63 million pounds in 2018
to 89 million pounds in 2019.**

4. Program Outline: Collection & Recycling Sites

The estimated total capacity used in 2019, based on all 8 capacity data reports, is 280 million pounds per year (140,000 tons) or 92% of 2019 discards, an increase of 0.4% from the 279 million pounds reported by eight processors in 2018. In the preparation of this 2019 report, CARE realized that a reporting error was made in the 2018 Annual Report for this section – the reported volume only included processing capacity estimated for California PCC rather than reporting the total maximum capacity of all reporting processors as reflected above at 279 million pounds.

It should be noted that reported capacity figures reflect capacity which may be used to support carpet recycling flows both in and outside of California, such that available capacity to support California throughput may fluctuate over time with changes in domestic market PCC supply and demand and individual business practices. To better understand the available capacity used for California-generated PCC in 2019 specifically, CARE requested data from processors estimating the percent of available capacity used in 2019 for California PCC processing – this was the third year such data was requested. In 2019, capacity data from 8 processors estimated that approximately 75 million pounds (37,500 tons) of capacity was used to process California PCC during the period, of which 61 million pounds (31,000 tons), or 20% of 2019 discards and 74% of 2019 gross collections was in California. Across the capacity data analyzed, approximately 61% of the estimated maximum capacity was utilized. While the standard annual capacity survey was conducted, given the delay in the release of grant funding planned for 2018 and the subsequent back to back grant funding cycles to further support capacity expansion toward achieving the 24% recycling rate, the initially planned capacity study for 2019 was delayed.

Capacity varies as CSEs, Tier 1 processors, and Tier 2 manufacturers enter/leave the market or expand/downsize their operations. Despite the 2017 year-end loss of Carpet Solutions, a large Southern California CSE/processor, California has benefited from the growth and strategic capacity expansion efforts of their two successful CSE/Processors Circular Polymers and Los Angeles Fiber Company. Each of these processors were supported by CARE through capital equipment and capacity expansion grant funding. Between 2018 and 2019 grant cycles, Circular Polymers received over \$1.7 million and Los Angeles Fiber Company received \$1 million.

Capacity Expansion Grant Support

2018:	\$500,000 Aquafil Woodland \$500,000 Circular Polymers \$500,000 Los Angeles Fiber Company
2019:	\$325,000 Circular Polymers \$900,000 Circular Polymers \$500,000 Los Angeles Fiber Company

As the Program continues to increase demand from Tier 2 manufacturers, Tier 1 processor excess capacity can be consumed. As development efforts for new end markets began to finally gain traction, demand increased significantly for PET in late 2019. Unfortunately, a new California processor expected by Q3 2019, Aquafil #2, was scheduled to begin nylon 6 processing operations at their new facility in Woodland, California, however devastating wildfires and utility bankruptcy hampered their ability to secure necessary power supply, thus delayed their ability to open until later in 2020. Again, it was projected that Aquafil #2 would have contributed approximately 15-18 million pounds of capacity in 2019, and a stated eventual maximum capacity of 36 million pounds.

With each of these efforts continuing to take hold in the market, coupled with the increasing demand for nylon 6, a significant increase in capacity and capacity utilization is anticipated. Although a long-time Program priority, the passage of AB 1158 prompted the Program's adoption of a new specific goal of increasing capacity including California capacity beginning in 2018. The denied grants release requests, until Plan approval, were eventually released back to back in a substantial effort to make up for time lost (15 months) in support of collections and capacity expansion. CARE's Cycle 2A capacity expansion grant funds originally planned for award in late Q1, were eventually released in October 2018, while \$1.1 million in Cycle 3A funds were promptly released and awarded in April 2019.

4.10 Throughput

Per CalRecycle's [Facility Information Toolbox \(FacIT\) Glossary](#), throughput is defined as the total amount of material actually received at a facility for a specific activity in tons per year (TPY).

In 2019, Tier 1 processors and Collector/Sorters collected and managed approximately 41,071 tons of PCC. This is a 12% decrease from the 46,763 tons of PCC collected in 2018. While all parameters affecting this decrease are not known, contributing factors include: an earlier than expected Q3 slowdown in generation of PCC from suppliers, and manufacturer pull through demand losses which resulted in a somewhat slowed PCC collection expansion. Manufacturer losses included a recycled lumber manufacturer, delayed start-up of a replacement dimensional lumber manufacturer, Q4 slowdown in the automotive sector, facility technical challenges for a key nylon processor, and a major capital project delay due to permit delays. It should be noted that despite the decrease in PCC collected, the addition of new capacity, a tile processor, expanded PC4 end markets, increased efficiency of existing production, and utilization of prior historic inventories ultimately resulted in an overall increase in Recycled Output of 17.7% which is reflected in Figure 4-9.

2019 highlights:

- 29,004 tons of Recycled Output (Reuse + Type 1) or 19.9% of the discards were recycled in 2019. The yield was 71% of the gross collections (indicating nearly three quarters of all material collected is converted to recycled output, continuing to show a strong upward trend increase from the recent past historical average of approximately 38%, or over a third). Recycled Output by weight increased 17.6% from 24,654 tons in 2018. Recycled output in 2019 includes: Type 1 Fiber/Depoly (73%), PC4 (24%), carpet tile (1%) and reuse (1.2%).

2019 Yield 71%

Achieves and exceeds

Performance Goal #1: Increase Recyclability of Carpet

Annual Goals: 2019 (45%), 2020 (50%), 2021 (55%), 2022 (60%)

- Yield increased 34% from 53% in 2018 to 71% in 2019. Since 2015, yield has consistently increased year over year showing 34%, 35%, 48%, 53%, and 71%, respectively for the years 2015–2019. A considerable segment of that increase can be attributed to improved technologies and expanding markets for PC4.

4. Program Outline: Collection & Recycling Sites

- Type 1 Fiber/Depoly Recycled Output continued to compose the largest portion of recycled output, increasing 19% in 2019 to 21,200 tons, up from 17,767 tons, in 2018.
- PC4 Recycled Output grew to 7,038 tons in 2019, up from 6,286 tons in 2018, a 12% increase.
- Carpet tile recycled 28%, from 235 tons in 2018 to 300 tons in 2019.
- Reuse decreased slightly by 2.5%, from 367 tons in 2018 to 358 tons in 2019.
- Carpet cushion/pad diversion decreased to 4,246 tons, down 6% from 4,528 tons in 2018.²
- Exports decreased from 305 tons in 2018 to 234 tons in 2019, a 23% decrease from 2018. Exports now only represent 0.2% of total discards.
- Kiln was up, from 0 tons in 2018 to 9 tons in 2019. WTE was down from 916 tons in 2018 to 0 tons in 2019. CAAF increased, up from 0 tons in 2018 to 1 ton in 2019. Combined, total energy recovery (CAAF + Kiln + WTE) decreased 99% from 916 tons in 2018 to 10 tons in 2019.
- With an increase in Recycled Output processing of 8.7 million pounds, process waste sent to landfill disposal actually decreased by 30.6%, from 11,587 tons in 2018 to 8,036 tons in 2019. A key factor in reduction is renewed and stronger long-term outlets for PC4 along with a slight increase in commercial nylon fiber partially contributed to decrease landfill disposal; however, consumption of historic East Coast fiber inventory contributed slightly.
- Compared with the 2018 inventory decrease of 34% between Q1 and Q4 2018, which would be viewed as a seasonal fluctuation, the 2019 inventory decrease is more sizeable and positive. A prior sizeable 2017 inventory decrease of 52% was primarily attributable to the closure of Carpet Solutions. The 2019 Q1 to Q4 decrease was 45% from 4,054 tons in Q1 to 2,238 tons in Q4 and can be attributed to expected CSE and Processor efforts to meet new market demands, previously noted historic inventory drawdown and achievement of an all-time program high 22.5% recycling rate in Q4 and overall 19.9% for all of 2019. However, there was a one-time sizeable inventory conversion to recycled output for business reasons.

² Carpet cushion/pad recycling is a tertiary co-benefit of the Program. While cushion/pad is not including in Program total recycled output figures, it is reported as an additional co-benefit of Program efforts resulting in additive diversion from California landfills during the term.

4. Program Outline: Collection & Recycling Sites

Over time, the Program continually seeks to increase yield to maximize recycled output for secondary use and minimize the amount of processing waste material sent to energy recovery or landfill. Increasing the yield of carpet during the recycling process can have a significant impact on the program's total recycling and diversion rates, without increasing current gross collections. The PC4 subsidy continues to play a significant role in increasing overall yield from 53% in 2018 to 71% in 2019, as uses for this previously unrecyclable component of carpet backing continues to take hold. Increased subsidies, grants, and market development technical assistance support have also been key factors in this increase. shows a summary of final disposition data for all gross collections managed by Tier 1 processors, CSEs and the CARE drop-off site program.

Table 4-6. Summary of Throughput and Disposition in Tons Per Year (TPY), 2019³

Summary of Throughput and Disposition in Tons Per Year	Q1 (Beginning of Period)	Q2	Q3	Q4 (End of Period)	2019 (Full Reporting Period)
Throughput (TPY)					
Gross Collected - by CSEs (TPY)	1,678	1,394	1,436	1,522	6,030
Gross Collected - Processors (TPY)	7,969	8,918	9,819	8,335	35,041
Total Gross Collected (Sum of Processor + CSEs)	9,647	10,312	11,255	9,858	41,071
Recycled Output (TPY)					
Recycled Output (TPY) (reuse, tile recycled, fiber, depoly, calcium carbonate, filler, carcass)	5,525	7,531	8,178	7,769	29,004
	16%	18%	20%	23%	17%
Recycled Output Yield (% conversion GC:RO)	57%	73%	73%	79%	71%
Inventory					
Whole Carpet + Processed (TPY)					
Beginning Inventory	4,054	3,582	3,679	3,582	4,054
Ending Inventory	3,474	3,645	4,080	2,238	2,238
Total Diversion (TPY)					
Reuse	84	71	119	84	358
Tile Recycled	36	98	87	78	300
Fiber / DePoly	3,837	5,529	6,084	5,750	21,200
PC4	1,568	1,726	1,888	1,857	7,038
Filler	0	0	0	0	0
Carcass	0	107	0	0	107
Kiln	0	9	0	0	9
CAAF	0	0	1	0	1
WTE	0	0	0	0	0
Exports	234	0	0	0	234
Carpet Cushion/Pad	914	1,095	1,209	1,027	4,246
Out-of-State					
Out-of-State	1,799	1,632	1,651	1,421	6,503
Disposal (TPY)					
Waste to Landfill	2,635	1,794	1,712	1,895	8,036
Incineration	0	0	0	0	0

Table Note: Metric definitions are current as of 2019. Definitions have evolved over time and may have been different in the past. Under the Total Diversion category, Reuse, Tile Recycled, Fiber/DePoly, PC4, Filler, and Carcass are the only activities or material use that contribute to Recycled Output.

³ Gross collection tons are estimated by the CSEs based on average weight of inbound loads. Thus, this table should not be construed as a true mass balance. Outbound tons are known more precisely since the CSE is either being paid for each ton or they are paying for each ton to be managed/disposed.

4. Program Outline: Collection & Recycling Sites

With a strong market demand foundation which included grant funded capacity expansion plans, two long-planned new processing facilities expected to come on in Q3 and Q4 to increase throughput, and an expected dimensional lumber end market demand for PET in 2019, the Program was on course to meet and likely surpass the required 24% recycling goal. However, as previously noted, jurisdictional permitting delays, historic wildfire delaying power delivery, China trade war challenges, and business startup challenges throttled recycled output goals. Either of the two delayed projects, both delayed by 12 months or more, would have pushed CARE beyond the 24% target.

While 10 out of 17 processors increased their 2019 Recycled Output over 2018, unfortunately, decreases elsewhere together offset roughly 82% of all gains achieved during the period. These declines included the ongoing discontinuation of a PC4 end use during Q1 and Q2, the sale of a PET-consuming decking lumber manufacturer, as well as market dynamics resulting in a drop in Processor demand of 8 million pounds, another processor's technical/operational delays causing a loss of 1 million pounds, and one East Coast processor's bankruptcy during the term.

Figure 4-9 is designed to show the impacts of production as existing output declined while new recycled output came online. The 2018 bar indicated where CARE finished the year in terms of recycled output in pounds. The light red bar (-11 million pounds) indicates the drop in recycled output by existing processors while the light green bar (+19.7 million pounds) indicates the additional new recycled output. The net impact is an increase of 8.7 million pounds of recycled output in 2019 over 2018 or a 17.6% increase.

Figure 4-9. Change in Recycled Output (2018 vs. 2019)

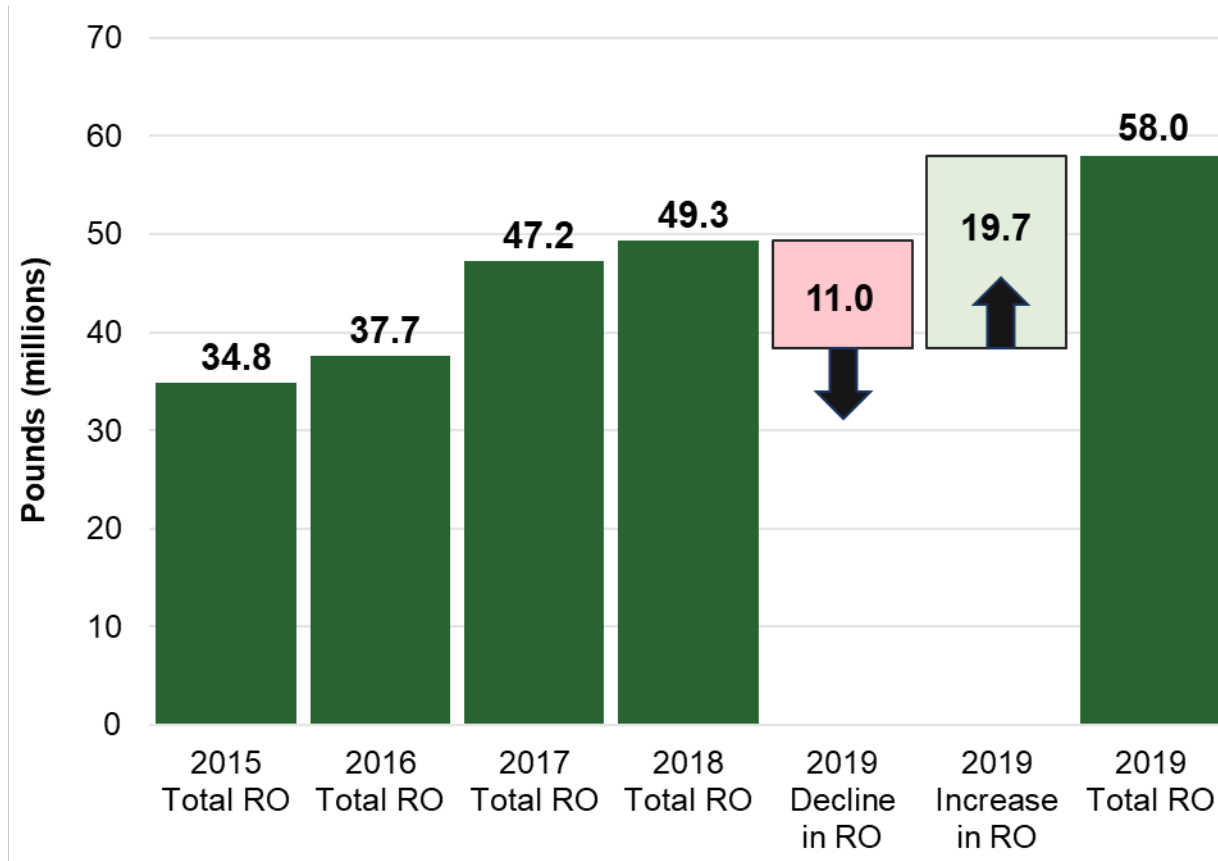


Figure Note: For the Annual Reports from 2017 forward, this figure contains all of the components of Recycled Output. In the 2016 Annual Report, only Type 1 Output and PC4 were included which made up approximately 97% of Recycled Output in 2016.

4.11 Disposition Facility Types

The California Program maintains records of the names and locations of facilities engaged in disposition methods, including the following facility types:

- Collector/Sorters: Collect and sort carpet discards (see Table 4-3).
- Tier 1 processors: Convert gross collections into recycled output (see Table 4-4).
- Tier 2 manufacturers (non-nylon and nylon 6): Utilize non-nylon (PET/PTT or PP), nylon 6 (N6) or nylon 6,6 (N6,6) recycled output in the manufacturing of secondary products (see Table 4-5). *(Note: Nylon 6 manufacturing was added to the Program in October 2017; beginning 2019, nylon 6,6 Tier 2 manufacturers are now eligible for incentives.)*

4. Program Outline: Collection & Recycling Sites

- Public drop-off sites supported by the California Program (see [CARE website](#) and Appendix 10.6).

Every Program participant receiving subsidy funds is required to maintain records regarding the facilities they use for each disposition method. This includes facilities that handle disposition for CAAF/Kiln processing, exports, cushion, reuse, WTE, and landfill/disposal. Each Program participant must record the disposition facilities used. Records are subject to periodic review and verification by the Program's third-party accounting firm Aprio in line with AUPs. The California Program also has access to these confidential records through these periodic reviews, and requires regular reporting, recordkeeping, proper management practices, and random site visits for Program participants.

5 Program Goals & Activities

CCR Section 18944(a)(5). Description of goals and activities based on stewardship plan. State goals from the approved plan, the baseline from which goals were measured, and report on achievement during the reporting period.

5.1 Introduction

Throughout 2019, the California Carpet Stewardship Program demonstrated the profound beneficial impacts of aligned Program efforts, and especially strategic market development partnerships coupled with long-planned grant funded investments being allowed to take hold and deliver impact. Once again, Program results reflected a consistent upward trend of steady progress toward Program goals, including rigorous efforts to achieve a 24% recycling rate by January 1, 2020. Despite macroeconomic challenges in global markets, including China's National Sword policy, affecting progress toward Program goals, the recycling rate increased 27% overall from 2018 (15%) to 2019 (19%), and specifically quarter over quarter, a 44% increase from Q4 2018 (15.6%) to Q4 2019 (22.5%). Since the 2015 world market decline, the CARE Program has successfully rebounded to maintain a solidly consistent, upward growth trend in the recycling rate in each year. Despite losing two major end-market outlets in June and September 2018 and a delayed grant funding release in 2018 which significantly throttled Recycled Output and Recycling Rate results for 2019, coupled with a new Processor not coming online due to devastating wildfires resulting in an inability to secure power to the facility, a major Processor capacity expansion delayed due to jurisdictional permitting issues, the Program was still able to achieve consistent and significant upward trajectory growth.

Eight fundamental goals continued to guide the program, and major metrics related to Program performance goals are summarized by year in Table 3-1 on page 22. These metrics are compared to a baseline year, defined by CalRecycle as the Program's first 12 months of operation from July 1, 2011, to June 30, 2012. Other metrics in the table are reported by calendar year from January 1 to December 31.

With the final approval of CARE's new 2018–2022 5-year Plan on February 20, 2019, the Program incorporated the additional goals required in AB 1158 and addresses them in this annual report. A brief summary of specific performance goals, major progress toward these goals, and related report sections providing additional information is presented in Section 5.1.2 starting on page 75.

5.1.1 Lessons Learned

CARE has prided itself on being a learning and continuous improvement-based organization. While some of those lessons have been hard to accept, we have learned from them and they have helped us build a more robust and transparent program. While many lessons have been learned over the years, and some play out over a period of longer than a year, such as the Beaulieu bankruptcy as an example. Having developed internal controls helps provide clarity and guidance, while avoiding mistakes of the past. Here are the high-level lessons learned and resulting changes in the Program and its protocols.

- **Communication** – In addition to CARE’s formal antitrust, ethics and confidentiality internal controls, CARE issued a formal Communications Policy, which addresses the sharing of sensitive information outside the Board.
- **Tardiness: Late Filing and Delisting Protocol** – When dealing with small businesses that are understaffed, it is common to find missed deadlines, delayed payments, and improperly completed paperwork. As a result, CARE has codified the formal policy for addressing such lateness including fines and the potential for termination as a member-in-good-standing. These protocols are incorporated into formal contracts with the recycling and mill communities.
- **Volume Changes** – Based on lessons learned in dealing with three now out of business recyclers, CARE adopted two forms of “flags” as a part of the data review process. The first is an “absolute volume” flag, where any volume that is higher than the pre-set limit is automatically flagged. CARE also has a “% increase” flag, where any increase above the set limit is flagged. Any item that receives a flag is identified for review and discussed in monthly data review meetings by CARE Executive Director, Finance Director, California Program Director and Aprio. Each case is handled individually to understand the circumstance involved, and where warranted would initiate a site visit. As an example, an inventory increase from 25,000 to 75,000 pounds would not receive a volume flag but would trigger a percent increase flag. There are many reasons for changes that incur flags; most are well understood, but where they cannot be explained, the CARE team contacts the recycler or mill for an explanation, which is then documented in the tracking system. Should a change raise a concern, an individualized action plan would be undertaken.
- **Grants** – Recent experiences have caused the Program to make a number of changes in grant contracts. The most significant lessons learned are the inclusion of a first lien provision in all new grant contracts and the option to file a UCC-1 claim on equipment funded by a grant. (A Uniform Commercial Code-1 statement is a legal form that a creditor files to give notice that it has a financial interest in the property of an entity that owes a debt to the creditor.) CARE may also place decals on funded equipment for identification purposes. The grants review committee includes key CARE staff, CARE independent contractors, and

independent subject matter expert reviewers generally from local government, universities, recycling industry and/or business. Additionally, mechanisms have been put in place for immediate grant funding disqualification should undue influence or pressure be placed on any grant review committee member or CARE Executive Director.

- **Recycled Output Applications** – CARE issued revised [guidelines](#) regarding in- and on-ground application in September 2019 to ensure safe and legal use of recycled output, including post-consumer carpet calcium carbonate (PC4).
- **Models** – CARE has commissioned the development of several first-of-their-kind models to help understand and manage the California Carpet Stewardship Program. There have been numerous lessons learned and the recent study conducted by Crowe of both recycling costs and a validation of the models is helping guide the next iteration of the models. Key learnings, beyond independent validation of the models, included making the Economic Model more predictive, Cost Conversion Model fine tuning to separate revenues and costs while also incorporating depreciation, and continually evolving the Financial Model as a working tool for the Program. Additionally, Subsidy Justification Model recommendations included conducting ongoing sensitivity analysis, preparing separate versions for processors and manufacturers, as well as a materials flow analysis.
- **Forecasting** – In consideration of the sale and discontinuation of Fiberon’s Minnesota operation (2019), start-up delays due to equipment and process issues, and project delays due to permitting and power issues, CARE is working to build more sensitivity analysis into its forecasting. In addition to subsidy reporting, each month the Program reviews the actual versus budgeted performance of every recycler in the program to identify any issues, concerns, or patterns and asks recyclers the question, “What can we do to help?” A key, and very unknown, forecasting concern area arising in China at 2019 year-end relates to the potential Covid-19 Coronavirus impacts on global markets overall.
- **Complexity** – While CARE and the recycling community have been engaged for nearly a decade, the dynamic markets and complexity of the supply chain continue to represent a challenge. CARE is perpetually learning that in addition to the workload shouldered every day along with recyclers, the Program must redouble efforts to educate stakeholders. There are many stakeholders who seem to have good intentions, but who have not run a business, do not understand technology in general or carpet recycling technology platforms, are overly optimistic about the timing to execute capital projects involving major pieces of equipment, do not understand markets and competitive jockeying for sources and PCC vs. Post-Industrial vs. virgin material pricing drivers, and do not understand the basic economics of a volume-driven business model where pennies per unit make a difference.

The lessons learned are paying off, and the rising recycling rate over time shows the progress is real, sustained, and growing. CARE is fortunate to have a team of talented, dedicated, and passionate professionals who provide a steady hand in the face of criticism. The increase in recycling in 2019 directly reflects the grant investments allowed in late 2018, following 15 months of delays during the development and approval process of the updated Plan.

5.1.2 Program Highlights: Goals and Major Progress

GOAL 1: Increase the Recyclability of Carpet

References: Sections 5.7 and 5.8; Plan pages 13, 31, 226

Metrics:

- **PRIMARY GOAL – Yield (%) of 60% by 12/31/2022**, Calculations: RO/GC.
- **Gross Collection (GC) (pounds)**; Calculations: pounds as reported by CSEs.
- Mill investment Closed-Loop Recycling and Recyclability; Calculations: annual mill survey.

MAJOR PROGRESS:

Recyclability as measured by increased **gross collection, yield, and mill investment in closed-loop recycling and recyclability:**

- Overall recyclability as indicated by **yield** increased in 2019 to **71%** of gross collections—the highest ever—compared to 53% in 2018 and a historical average 34% in the first 5 years of the Program (2011–2016). This increased yield reflects increased recycled output, especially PC4, and decreased gross collections driven by lower sales.



ACHIEVED and EXCEEDED 60% Yield goal 4 years EARLY.

- **Gross collection** decreased 12% from 94 million pounds in 2018 to **82 million pounds in 2019**.
- Technical assistance grants and PC4 subsidy resulted in a 12% increase in PC4 carpet backing recycled output totaling **14.1 million pounds in 2019**, up from 12.6 million pounds in 2018, 10.5 million pounds in 2017, and 2.4 million pounds in 2016. PC4 recycled in 2019 represented 24% of total recycled output, up from <1% in 2015.
- Mill investment in closed-loop recycling and recyclability, an annual mill survey to be conducted in 2020.

GOAL 2: Expand and Incentivize Markets for Products Made with Post-Consumer Recycled Carpet Content

References: Section 5.11 and Chapter 6; Plan pages 13, 34, 228

Metrics:

- Number of PCC recycled-content products in marketplace, obtain through

MAJOR PROGRESS:

Expanded and incentivized market growth:

- Recycled carpet content products increased to 77 products from 25 manufacturers, 10 in California. See Appendix 10.7 for list of manufacturers and product counts.
- ☑ **ACHIEVED & EXCEEDED products & manufacturers goal 4 years EARLY.**
- Tier 2 products shipped/sold were again the highest to date, at 26.1 million pounds in 2019, up 5% from 24.8 million pounds in 2018. PC4 uptake in new products increased 12% in 2019 over 2018.
- Awarded grants in Cycle 2 (late 2018) and Cycle 3 (2019) for capital investments, product testing, and collection/reuse to support the collection, recycling, and manufacture of recycled carpet products.

GOAL 3: Increase Reuse of Post-Consumer Carpet

References: Section 5.6.1; Plan pages 13, 36, 226

Metrics:

- **Reuse pounds.** Calculations: 1.2 million pounds in 2019 and 1.8 million

MAJOR PROGRESS:

Reuse decreased during the period:

- The carpet tile/broadloom reuse subsidy implemented in 2015, coupled with the additional carpet tile reuse/recycling pilot subsidy added in 2018, resulted in **717,000 pounds of PCC reused in 2019**, a 2% decrease from 734,000 pounds of PCC reused in 2018.

- 83% of reuse recorded in 2019 was generated from carpet tile reuse.
- A new subsidy beginning in 2018 focused on increasing both reuse and recycling of carpet tile, considered the most readily reusable portion of discarded post-consumer carpet.

GOAL 4: Increase the Weight of PCC Recycled

References: Sections 5.5 and 5.6.2; Plan pages 13, 39, 226-227

Metrics:

- RO (pounds) = 52 million pounds in 2018 and 84 million pounds in 2022.
- **Carpet Sold in California** (square yards); Calculations: Sales in Discards
- Recycling Rate

MAJOR PROGRESS:

- Continued **improvement in recycled output (RO)** despite delayed grant releases, permit delays and PG&E failure to deliver power.
- **Increased RO to 58 million pounds** in 2019, an **18% increase** from 49 million pounds in 2018.
- **Increased Recycling Rate to 19%**, up from 15% in 2018. Q4 2019 reached a historical high of 22.5% recycling rate – a 44% increase over Q4 2018.
- **Fiber recycled output increased 19%** to 43 million pounds from 36 million pounds, and PC4 recycled increased to 14 million pounds, a 17% increase from 12 million pounds.
- **Carpet tile recycled increased 28%** to 0.6 million pounds from 0.47 million pounds in 2018.

GOAL 5: Reduce the Disposal of PCC from CA Landfills

References: Sections 5.6 and 5.9; Plan pages 13, 43, 226-227

Metrics:

- **Carpet Sold in California** (square yards); Calculations: Sales in Discards
- **PCC Discards** (pounds); Calculations: Discards formula.
- **Gross Collection** (pounds); Calculations: Collector/Sorter pounds.
- **Disposal**; Calculations: Discards – Recycled Output.

MAJOR PROGRESS:

Disposal of PCC reduced from California Landfills:

- Of the 82 million pounds of PCC Gross Collection, **process waste** sent to landfill **disposal decreased 31%**, from 23.2 million pounds in 2018 to 16.1 million pounds in 2019.

Diversion by energy recovery declined, and net diversion decreased:

- 22% of PCC discards in 2019 were net diverted from California landfills, same as 2018.
- Diversion via energy recovery (sum of CAAF, Kiln, WTE) decreased 99% in 2019, falling from 1.8 million pounds in 2018 to only 19,000 pounds in 2019.
- Decrease in WTE from 1.8 million pounds in 2018 to 0 in 2019, a 100% reduction.

GOAL 6: Increase Collection Convenience for the Recycling of PCC and

References: Sections 4.2 and 5.5; Plan pages 13, 51, 228

Metrics:

- **Number of California Drop-off Site locations;** Calculations: Number of Drop-
- **Reasonably Convenient Collection;** Calculations: metric to be informed by
- Increase Private Collection sites: 267 by 2021

MAJOR PROGRESS:

Number of public Drop-off Sites (DoS) increased, and Collection Convenience increased:

- Program public **drop-off locations increased 38% to 73 drop-off sites servicing 50 counties**, up from 53 sites serving 47 counties in 2018. In 2019, 10.2 million pounds of PCC were collected by public drop-off sites, a 29% increase from 7.9 million pounds in 2018.
- 99.1% of state's population lives within a county with one or more private or public collection sites, an average of one site per 142,819 people; improved upon from one site per 187,000 people in 2018.
- 89% of residents within 20 miles of Drop-off Sites and 63% are within 10 miles.
- 87% of retailers are within 20 miles of Drop-off Sites and 59% are within 10 miles.
- Increased to over 160 private collection sites.

GOAL 7: Increase Processor Capacity, Including in California

References: Section 4.9 and 4.10; Plan pages 13, 56, 225

Metrics:

- Capacity: study to be completed by mid-2019

MAJOR PROGRESS:

Processor Capacity expansion in/out of California:

- Maximum **California capacity increased by 40%** from 63 million pounds in 2018 to 88 million in 2019.
- Grant funding has been awarded to two existing and two proposed California processors: agglomerated pellets, PC4 and Nylon.
- Total Processor capacity increased by 4% from 444.6 million in 2018 to 461.9 million in 2019.

GOAL 8: Achieve 24% Recycling by January 1, 2020, and Other Recycling Rate

References: Sections 5.1 and 5.8; Plan pages 13, 61, 225

Metrics:

- Recycling Rate

MAJOR PROGRESS:

Progressed to **Annual Recycling Rate: 19%**

- Q1 15.6%
- Q2 18.4%
- Q3 19.9%
- Q4 22.5%

Note: The 24% recycling rate would have been achieved if either of two long-planned projects, Aquafil-Woodland or Los Angeles Fibers, had not been delayed due to PG&E failure to deliver power due to unprecedented wildfires and extensive jurisdictional permitting delays.

Results are tracked and monitored by the CARE California Carpet Stewardship Program on an ongoing monthly basis and voluntarily reported to CalRecycle quarterly, approximately 90 days following the end of each quarterly reporting period. Since 2018, these quarterly updates with CalRecycle also include two representatives from the Advisory Committee. Since the Program began, 34 quarters of data has been collected (July 2011 through December 2019), providing Program staff with the ability to track trends and progress toward Program goals over time. This report presents the best available data for the four quarters of calendar year 2019.

Annual performance goal tracking tables on each of the above eight areas are found in Appendix 10.1.

5.2 Carpet Sales

CCR Section 18944(a)(5)(A)1. Amount of carpet sold by square yards and pounds, in the state during the reporting period that is covered under the approved stewardship plan. A stewardship organization with more than one manufacturer may use average weight.

In 2019, reported annual carpet sales totaled 80.6 million square yards, or 361 million pounds, based on an updated density estimate of 4.48 pounds per square yard as noted below. Sales in 2019 were down more than 6% compared to reported sales in 2018 (86.0 million square yards), as shown in Figure 5-1. Sales in spring and summer (Q2 and Q3) were higher than winter and fall and winter (Q1 and Q4), consistent with typical seasonal fluctuations. Q4 sales in 2018 were 18.3 million square yards, the lowest in Program history. Note not only the continuous decline in California sales, but also the accelerating rate of decline. Various factors may be contributing to this decline such as flooring design trends, converting main living areas to hard surfaces with the use of area rugs, a slight decline in housing sales, etc. Industry reports have noted the shift as well, including a Floor Covering Weekly article referencing [Floor Covering Industry Trends from Catalina](#), which notes: “The report stated hard surface flooring represents over half of total U.S. floor coverings sales in dollars and square feet as consumers increased their preference for luxury vinyl tile (LVT) and ceramic tile. At the same time, floor coverings buyers have significantly reduced their purchases of wall-to-wall carpet.” Another factor is the assessment itself which has a far greater impact on the apartment and condo markets than on individual consumer purchases. It is worth noting the sales decline in California is significantly greater than the rest of the U.S. and certain segments of the market are impacted more by the increased assessment.

With the noted and accelerating sales decline, consideration needs to be given to overall Program and product stewardship economics. Given that other flooring surfaces do not have a related-recycling assessment, carpet recycling assessments may increase to a point at which bottom-line pricing drives consumers to consider hard

surfaces simply covered with non-recyclable rugs. Such a situation could lead to a detrimental financing impact on the Program. Conversely, other home related stewardship products such as paint and mattresses, do not have other widely accepted/used lower cost wall covering or sleep products that could serve as replacements should their assessment rates increase beyond a threshold point (e.g., wallpaper costs more than paint).

Figure 5-1. California Carpet Sales Over Time

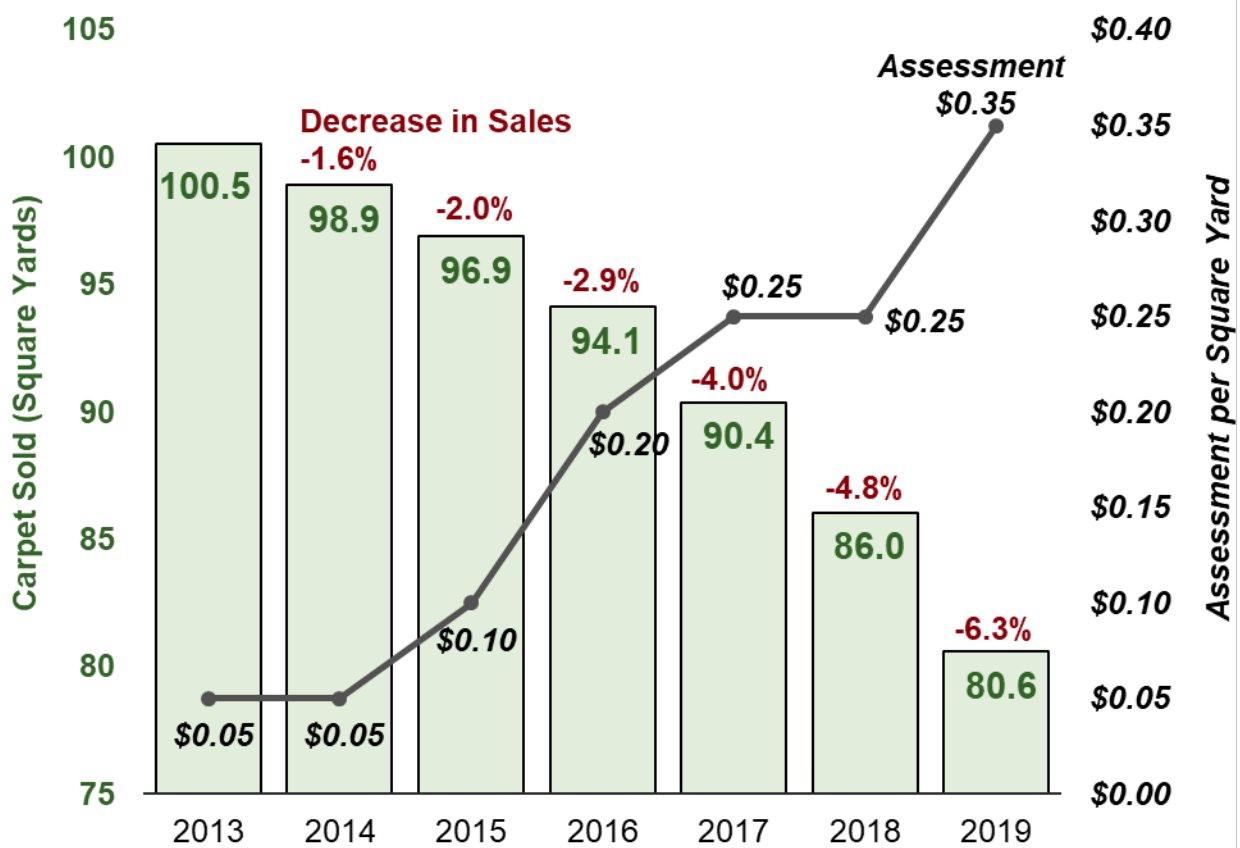


Table 5-1. Assessment Costs Over Time

Assessment	2013	2014	2015	2016	2017	2018	2019
Cents per square yard	5¢	5¢	10¢	20¢	25¢	25¢	35¢

CARE most recently examined average weight per square yard in late 2018 (4.48 pounds per square yard), specifically as it relates to California sales. This figure showed a 2% increase from the prior weight of 4.39 pounds per square yard. This increase was reviewed with CalRecycle, noting that increasing use of carpet tile over broadloom in commercial applications could account for some or all of the increase.

The methodology for determining the weight per square yard was determined as follows: 59 mills were requested to fill out a survey detailing their weight per square yard sold separately of residential broadloom, commercial broadloom, and commercial tile. Mills were asked to provide the share among the three categories so CARE could calculate percentages into each market segment. As in the past, CARE used data from the top 10 mills for the calculation. The top 10 mills represent about 95% of all carpet sold (in dollars) in California.

5.3 Carpet Discards

CCR Section 18944(a)(5)(A)2. Amount (pounds) of post-consumer carpet that is available for collection.

In 2019, an estimated 304 million pounds of PCC were destined for landfills and available for collection in California. Of these calculated discards, approximately 82 million pounds were gross collected (27%), of which 58 million pounds were recycled. Since the program began, gross collections have ranged from 27% to 34% of total estimated discards.

Discards reported each year are estimated using the calculation methods outlined in Section 5.13. In 2019, CARE had a study in progress to review the Discards calculation methodology, in response to findings identified in the proposed 2017–2021 Plan. The study is reviewing the variables in the Discards formula and will consider updates if needed. CalRecycle was involved in the study design and will be consulted on findings.

5.4 Source Reduction

CCR Section 18944(a)(5)(A)3. Amount (pounds) of carpet source reduced, if measurable.

The California Program uses the average weight of carpet as its primary source reduction metric and to calculate estimated Discards (see Section 5.13.1). CARE generally conducts an annual confidential survey of carpet mill participants to determine the average weight per square yard for commercial tile, commercial broadloom, and residential broadloom carpet. The most recent data are based on the 2018 confidential mill survey. During CalRecycle's statewide waste characterization study in 2018, CARE commissioned the collection and measurement of additional samples of carpet found in disposed waste. Due to the close weight comparisons reported below between the Mill average weights and that reported from the aforementioned disposed waste sampling, CARE did not conduct their planned field assessment in 2019.

From program inception through mid-2016, the average weight of carpet was reported as 4.2 pounds per square yard. In 2016, results from the mill survey indicated a 4.5% increase in the average weight to 4.39 pounds per square yard; this value was used for the second half of 2016 and in 2017. The 2018 survey showed a 2% increase to 4.48 pounds per square yard. Although reasons for the increase have not been studied, factors that logically may have contributed include the continued shift from broadloom to tile (which is typically heavier) in the commercial sector, and possibly a shift away from lower-weight “builder grades” of carpet to vinyl plank flooring, thus reducing the volume of lighter-weight goods.

In 2018, the Discards Study included field measurement of carpet found in waste loads disposed at transfer stations and similar facilities throughout the state. This waste characterization research found similar density measurements to the mill survey, with a median density of 4.4 pounds per square yard. The reported average from the mill survey was used in the 2019 Discards formula calculation. Under the 2018–2022 Plan, the Program agreed to begin collecting additional information related to source reduction from mills; development of an expanded source reduction survey was slated for 2019 but has been shifted to 2020.



Mill representative comparing digital print of carpet on wall to carpet tile sample.

5.4.1 Carpet Mills and Source Reduction

Partly driven by customer demand, carpet mills are developing innovative approaches to sustainability that will have positive impacts on carpet recycling efforts and source reduction in years ahead. Due to the large capital investments involved and market penetration, major advances typically take five to ten years from conceptualization to commercialization before benefits are fully realized. However, as they take hold in carpet mill product lines, results will benefit both source reduction and overall recyclability of carpet.

As previously reported, one example is the innovative backing system that facilitates the recycling of both PET and nylon carpet. It offers mono-polymer and easily separated dual-polymer systems that eliminate calcium carbonate and latex adhesive and will contribute greatly to source reduction in coming years—reducing weight per square yard by approximately 40%. Another example is the separation of nylon face fiber from a PET backing system that will greatly improve processing efficiency. Mohawk, working in partnership to develop this technology with DSM-Niaga, launched the first product

line in 2016 (see Section 5.7). DSM-Niaga are continuing to work to expand this novel technology in the carpet sector.

One modest source reduction measure now used by many mills has been incorporation of high-definition digital printing prior to sample preparation. One mill reported producing over 18,000 custom face-fiber samples, and with incorporation of digital printing, production was reduced about 44% to around 10,000 samples. Industry-wide adoption of digital printing offers waste prevention savings of both production resources and landfill disposal. The adjacent image reflects the digital sample both in small roll (tile size), large format for full pattern, and final tile product size.

Similarly, several mills have incorporated a virtual experience that allows customers to upload a photo of their room and overlay various carpet patterns to aid in selection of their new product. This digital planning tool can help in reducing carpet sample shipments.

Nearly every carpet mill located in the United States has dedicated efforts to minimize the environmental impact of carpet manufacturing, reducing their reliance on natural resources to make new carpet, although mills are not currently required to report these efforts. Many carpet mills have expanded the third-party certifications on their product offerings and facilities, which include but are not limited to CRI Green Label Plus, Cradle to Cradle, Living Product Challenge, NSF-140, ISO 14001, Zero Landfill, and LEED. Under the 2018–2022 Plan, CARE will launch a new required annual mill survey in late 2020 to better track and report on source reduction practices of mills participating in the Program.

Examples of progress in 2019 include the following:

- In 2019, [Interface](#), [Shaw](#), and [Tarkett](#) continued to report using California recycled PCC content in various quantities in one or more of their carpet tile product lines. Additional carpet mills may use recycled PCC content generated from other locations throughout the United States. Currently, it remains difficult to quantify California-derived material percentages for individual product lines, although efforts to quantify this material continue.

Bentley Mills

- California-based [Bentley Mills](#) carries: CRI Green Label Plus on all products; Cradle to Cradle Certification-Silver Level on: High Performance PC Broadloom, AFFIXX™ Hardback, AFFIRMA™ Hardback, NexStep® Cushion Tile; and NSF® 140 certification on: AFFIXX™ Hardback, AFFIRMA™ Hardback, AFIRMA II Hardback, Elite Flex, Elite Flex Cushion, High PerformancePC, NexStep® Cushion Tile, Optimum Barrier™ II, Optimum Barrier™ II RC Cushion and Prestige PlusRC™.

- Bentley Mills, participates in International Living Futures Institute's (ILFI) Declare Program, a transparency initiative designed to promote product health and awareness. The labeling denotes where a product comes from, what it's made of and where it goes at the end of its life. Products are then screened against the Red List to identify overall product health. Bentley currently shows the following products with Declare labeling: AFFIXX™, AFIRMA™, High PerformancePC, NexStep®, Optimum Barrier™ II and Prestige PlusRC™.
- Bentley Mills Environmental Product Declarations (EPD) are certified in accordance with ISO 14025 which describe the environmental characteristics (environmental impacts of raw material acquisition, energy efficiency, and material content, air emissions, soil and water impacts, and waste generation) of their products and promote growth of sustainable production. The following Bentley products are covered by EPDs: High PerformancePC – COLORCAST™, High PerformancePC – Solution Dyed, NexStep® Cushion Tile – COLORCAST™, NexStep® Cushion Tile – Solution Dyed, AFFIRMA™ Hardback Tile – COLORCAST™, AFFIRMA™ Hardback Tile – Solution Dyed, AFIRMA™ II HARDBACK Tile – All Carpet Products, AFFIXX™ Hardback Tile–COLORCAST™, AFFIXX™ Hardback Tile – Solution Dyed, EliteFlex™ Cushion – All Carpet Products, EliteFlex™ Broadloom – All Carpet Products.
- Bentley Mills also carries Health Product Declarations (HPD™) on six of their product platforms. HPD is a tool for reporting of product contents and ingredients' relationship to human and ecological health and supplements the EPD. Bentley products covered by HPDs: AFFIXX™ Hardback Tile, AFFIRMA™ Hardback Tile, AFIRMA™ II Hardback Tile, EliteFlex™ Broadloom, High PerformancePC, NexStep® Cushion Tile.
- Bentley Mills is also the first manufacturing facility of any kind to earn LEED for Existing Building certification from the U.S. Green Building Council. After initially receiving LEED-EB Silver status in 2007 they went on to re-certify in 2013 and achieve LEED-EB Gold level.
- See Bentley Mills' [Sustainability Overview](#) for more information.

Dixie Group

- [Dixie Group](#) ensures every product produced is certified by CRI's Green Label Plus Indoor Air Quality Testing Program.
- Dixie's AtlasMasland products (commercial) manufactured in their Alabama facilities carry NSF/ISO 14001-2007 standards Gold level certification status.
- Dixie's AtlasMasland believes in transparency. That is why all broadloom and modular products carry a 3rd-Party certified Life Cycle Analysis, Environmental Product Declaration and Health Product Declaration.

- Dixie Group waste prevention efforts include: a self-addressed postage-paid label sample return program for the return, reuse or recycling; recyclable CAD renderings of custom carpet samples that eliminate more than 30,000 pounds of yarn waste annually.
- Dixie Group's manufacturing facilities in Alabama also divert over 3.5 million pounds of carpet and yarn waste from landfills each year, for reprocessing into their original composition or into other products, such as carpet padding, automobile parts, and roof shingles.
- Dixie Group's Atmore, AL commercial plant was heavily laden with products that either yarn that had to be skein dyed prior to tufting or the carpet was piece dyed after tufting. In 2013 the marketing direction focused on developing new products that used solution dyed yarns. After yarn and carpet dyeing were removed from the Atmore, AL facility, natural gas usage plummeted 81% and water usage was down 96%.
- Dixie Group continually strives to improve the sustainability story of their products and to constantly look for new and innovative ways to reduce its environmental impact. During the year 2019 Dixie Group developed its new, PVC and urethane-free Sustaina™ Backing System, which is a uniquely breathable cushioned backing, that is free of all red-listed components, and carries 77% plus total recycled content.
- Dixie Group's AtlasMasland commercial facilities in Alabama purchase enough renewable energy credits to cover 100% of their energy usage each year.
- See Dixie Group's [AtlasMasland Sustainability](#) website for more information.

Interface

- [Interface](#) currently offers many product lines with recycled content far above NSF-140 Platinum standards, some as high as 85% recycled content. Interface has identified ten product lines with California recycled PCC in excess of 10%. See [Product Listing](#) on website.
- Interface, Inc. introduced their Mission Zero in 1994 with a goal of no negative impact by 2020, having achieved that in 2019, their Climate Take Back mission objective is to reverse global warming. Presently Interface diverts over 91% of their landfill waste in working toward their Zero Waste to landfill or incineration by 2020.
- Interface's standard carpet tile products offer a minimum of 73% total recycled content with its GlasBac® backing and a minimum of 87% with its GlasBacRE backing.
- Interface notes 99% of their products globally have a third party verified Environmental Declaration (EPD).

- Interface announced Carbon Neutral Floors™ across its entire global product portfolio, which is key toward meeting its goals to become restorative to the planet. Their CQuest™ Backings line is an improvement upon their GlasBac™ backing which includes pre- and post-consumer recycled materials, bio-based additives, a non-vinyl backing made with biopolymers, net carbon negative recycled fillers as well as varying concentrations of carbon negative materials.
- See Interface's [Sustainability Overview](#) for more information.

Engineered Floors

- [Engineered Floors](#) verifies the material health and environmental responsibility of all their products using Environmental Product Declarations (EPDs) and Health Product Declarations (HPDs) based upon third-party verified Life Cycle Assessment data. Products meet the following standards and certifications: CRI Green Label Plus, Floor Score, NSF, USGBC, WELL and are manufactured in an ISO 14001-2015 certified facility.
- Engineered Floors Kinetex® Textile Composite Flooring is certified NSF/ANSI 140 Platinum; Nexus® Modular, PremierBac® Plus and TitanBac® Plus are all certified NSF/ANSI 140 Gold.
- Engineered Floors was among the first floor covering manufacturers to obtain voluntary third-party verification. All Kinetex® products carry a third party verified DECLARE label and are Red List Free.
- Engineered Floors was certified in 2019 as 95% Waste Diversion from Landfill resulting in over 1 million pounds of waste yarn being redirected from landfill, reimaged and redesigned into a new product line called Paradigm Shift. Paradigm incorporates recycled nylon and reclaimed nylon, and is comprised of at least 50% pre-consumer recycled content from reclaimed materials.
- Engineered Floors Kinetex® carpet tile contains no less than 45% post-consumer recycled content, with one 24"x24" tile equaling 27 plastic water bottles. Kinetex® is NSF/ANSI-140 Platinum certified and has a Red List Free DECLARE label.
- Engineered Floors in 2007 developed the industry-leading R4® Program – Return, Reuse, Recycle, Reduce – to facilitate the recycling of all carpet, LVT, and Kinetex samples and architect folders that are no longer needed. Samples are either returned to sample inventory for reuse on other projects or they are recycled. On average, Engineered Floors' commercial division (J+J) reuses/recycles 5,000 pounds of samples each month.
- See Engineered Floors' commercial division, J+J, [2019 Sustainability Report](#) for more information.

Milliken

- **Milliken** Floor Covering was awarded International Living Future Institute's (ILFI) first 3rd Party Verified, Red List Free Declare Label for any product globally. Additionally, all Milliken carpet tiles manufactured in North America are 3rd Party Verified, Red List Compliant/Red List Free.
- Milliken's WellBAC™ Comfort and WellBac™ Comfort Plus cushion backed carpet tiles are Cradle to Cradle Certified Silver. All Milliken WellBAC™ comfort modular carpet globally contains between 28-56% post- and pre-consumer recycled content.
- Milliken has reached the NSF/ANSI-140 certification levels on the following products: ESP Backed Carpet Tile –Platinum; ES Cushion Back Carpet Tile – Gold; and Commercial Broadloom – Gold.
- Milliken Floor Covering has committed to and conducted Life Cycle Assessments against the ISO 14040 Environmental Management Standard before leaving the drawing board for 100% of the commercial flooring solutions they produce globally and is in the process of completing LCAs for all new products, including those for residential interiors.
- Milliken's WellBAC™ cushion backed carpet tiles are warranted for life against adhesive breakdown due to moisture vapor emissions. This warranty allows for installation on concrete slabs without moisture testing and without RH or PH limits. Milliken's Site Related Solutions program eliminates the need for additional moisture mitigation products including sealing the concrete slab, leading to a dramatic reduction in the need for harsh chemicals which can lead to VOC's and other environmental impacts.
- Milliken WellBAC™ carpet tiles contribute to The WELL Building Standard in the following categories: VOC Reduction, Healthy Entrance, Fundamental Material Safety, Moisture Management, Toxic Material Reduction, Enhanced Material Safety, Cleanable Environment, Beauty and Design I, Material Transparency
- Milliken's La Grange, GA, manufacturing facilities are ISO-14001 – the highest global standard for environmental responsibility. Milliken's 2025 goal is zero waste to landfill.
- Milliken joined the United Nations Global Compact initiative—a voluntary leadership platform for the development, implementation and disclosure of responsible business practices.
- Milliken Flooring's US manufacturing facilities have sent zero process waste to the landfill for over 20 years.
- In 2019 Milliken announced it had partnered with PureCycle Technologies to restore used polypropylene (PP) plastic to "virgin-like" quality with their patented recycling method. One of the major feedstocks for the PureCycle partnership is

recycled carpet backing from California. The output of the first plant in Ohio is pre-sold for 20 years and the technology is expected to be scaled globally.

- See Milliken's [Sustainability Overview](#) for more information.

Mohawk

- [Mohawk](#)'s Air.O product line, working with DSM-Niaga, is composed of 100% PET contains no polypropylene backing, no latex adhesive, no calcium carbonate filler or harmful VOCs. This hypoallergenic carpet product, with an integrated pad, offers reduced material inputs, reduced complexity at the source while increasing recyclability at the end of life (see Section 5.7).
- Mohawk is "[Working Toward Zero](#)" by encouraging facilities to pursue zero waste to landfill (ZLF) certification which requires a plant to recycle or reuse 90% or more of its manufacturing process waste. To date, 48 Mohawk facilities have earned this certification (this includes carpet and other flooring facilities).
- Mohawk Group's Lichen Collection of carpet tiles for the commercial sector is the first floor covering to achieve Living Product Challenge Petal Certification and is inspired by biophilic assemblages of multi-hued, multi-textured lichens.
- Mohawk's Nutopia, Nutopia Matrix, Owls, Pattern And Symmetry, Smart City, Sunweave and Lichen products are NSF 140 Gold, CRI Green Label Plus, and Petal certified through the Living Product Challenge and utilize EcoFlex NXT or Matrix carpet backing which are Red List-free.
- Mohawk's SmartCushion, manufactured with 90% recycled content is environmentally friendly and LEED Certified. This product adds 20 years to the abrasive wear warranty, extending the overall life of the carpet.
- Mohawk's dedication to recycling has been captured in an artful way via their commissioned "Overflow: Make a Wave of Change with Mohawk Group" art installation by artist Basia Goszczynska ([video descriptor](#)).
- See Mohawk's [Sustainability Overview](#) for more information.

Shaw

- [Shaw](#) has reclaimed and recycled almost one billion pounds of carpet since 2006.
- Almost 90% of the products Shaw makes are Cradle to Cradle Certified—having been assessed for material health, material reuse (recycled content and recyclability), water stewardship, renewable energy and carbon management, and social fairness. And 95% of Shaw's carpet sales in 2019 (residential and commercial) were Cradle to Cradle Certified. This journey began with Shaw's

EcoWorx carpet tile in 1999 and continues across the company's product line today. A complete list of Shaw products [C2C certifications](#) can be found online.

- In 2019, Shaw unveiled a new soft floor covering known as COMFOR³T™, which stands to revolutionize the U.S. expo / trade show flooring market. Made with 60 to 80% recycled content (depending on the color), COMFOR³T reduces the use of virgin materials. The product can be reused multiple times and once it's ready for replacement, it is 100% recyclable. Competitively priced with existing expo carpets in the market, the COMFOR³T can be returned to Shaw and will be recycled back into new COMFOR³T products or other products that could benefit from this waste stream. The product is Cradle to Cradle Certified™ Bronze.
- Shaw, since 2009, has recycled and converted billions of plastic bottles into carpet each year. Shaw's Clearly Bold Platinum residential products feature up to 50% recycled fiber content. The company also uses recycled plastic bottles in its EcoLogix carpet tile backing, its new COMFOR³T trade show carpet and numerous needlebond carpet products. As Shaw invested \$250 million in its Andalusia, AL, manufacturing facility, the company expanded upon innovative technology used in other Shaw facilities to be able to process more recycled PET and to use a broader range of plastic bottles.
- Shaw additionally ensures their products meet indoor air quality performance for VOC (Volatile organic compounds) emissions using Green Label Plus, FloorScore and GREENGUARD certification programs. Health Product Declarations (HPDs) and Declare labels provide product ingredient and disclosure information.
- Shaw's Sustainable Sourcing Policy and practices help ensure that Shaw's commitment to Cradle to Cradle and the [Ten Principles of the UN Global Compact](#) are extended to its supply chain. No matter where or by whom a product or ingredient is made, it is held to the same high standards, with a commitment to sustainability.
- See Shaw's [2019 Sustainability Report](#) for more information.

Tarkett

- [Tarkett](#), in 2019, launched a new "Change to Win" strategic plan which puts circular economy at the heart of their strategy and business model.
- Tarkett achieved their Living Product Challenge Certifications on their commercial soft surface products in 2018. Additionally, Tarkett's ethos® Modular with Omnicoat Technology™ in 2018 met or exceeded every requirement in the City of San Francisco's widely recognized comprehensive carpet purchasing requirements, San Francisco "[Solutions at Work](#)."
- Tarkett's ethos® Modular with Omnicoat Technology™ backing, already a Cradle to Cradle Silver product, is International Living Future Living Product Certified. It

is also NSF 140 Platinum. A Material Health Statement and an ILFI DECLARE was published for ethos® as well. ethos® is “Living Building Challenge Compliant” as it contains no red list chemicals and contains 28–43% post-consumer recycled content.

- Tarkett’s commercial carpet backings ethos® Modular with Omnicat Technology™, Powerbond® Cushion, Powerbond® Medfloor, ER3® and Flex-Aire® Cushion have a Type III Environmental Product Declarations available.
- Tarkett’s commercial backings Powerbond® Cushion, Powerbond® Medfloor, ER3® and Flex-Aire® Cushion are NSF-140 Gold level. Tarkett’s anti-soil treatment, Eco-Ensure, is a water-based, non-fluorinated, anti-soil chemistry was re-certified Cradle to Cradle Material Health, Platinum level.
- Tarkett’s ErgoStep® broadloom carpet contains up to 10% post-consumer recycled content, LifeLONG® contains 28–40% overall recycled content and Powerbond includes 7–32% overall recycled content with a minimum 7% postconsumer content.
- Tarkett’s take-back and recycling program captures and recycled post-consumer carpet, a portion of which was collected from California and effectively recycled into ER3 product. The ethos® Modular carpet tiles contain between 48 and 64% total post manufacturing and post-use recycled content.
- Tarkett’s commitment to ISO 14001 certification achievement encompasses 85% of their facilities worldwide, including 9 commercial flooring manufacturing facility in North America. Tarkett has had 98% of raw materials 3rd party verified through the Cradle 2 Cradle criteria to maintain their commitment to healthy materials. And Tarkett set a goal for all products to achieve an average of 30% recycled content by 2030, compared to 10% in 2018. Tarkett is committed to less impact to the planet. They have recently updated processes at their Dalton facility which resulted in an 86% reduction in water usage.
- See Tarkett’s [Sustainability Overview](#) for more information.

5.5 Increasing Gross Collection

CCR Section 18944(a)(5)(A)4. *Amount (pounds) of post-consumer carpet collected, by weight, during the reporting period.*

Gross collection figures⁴ include estimated pounds of PCC removed from the waste stream and initially kept out of the landfill for reuse, recycling, or waste-to-energy (WTE) through collection, sorting, and processing activities conducted in coordination with consumers, retailers, installers, landfills, transfer stations, and material recovery facilities (MRFs). In 2019, the Program saw a 13% annual decrease in estimated gross collections (94 million pounds in 2018 to 82 million pounds in 2019), making up 27% of estimated annual discards (see Figure 5-2).

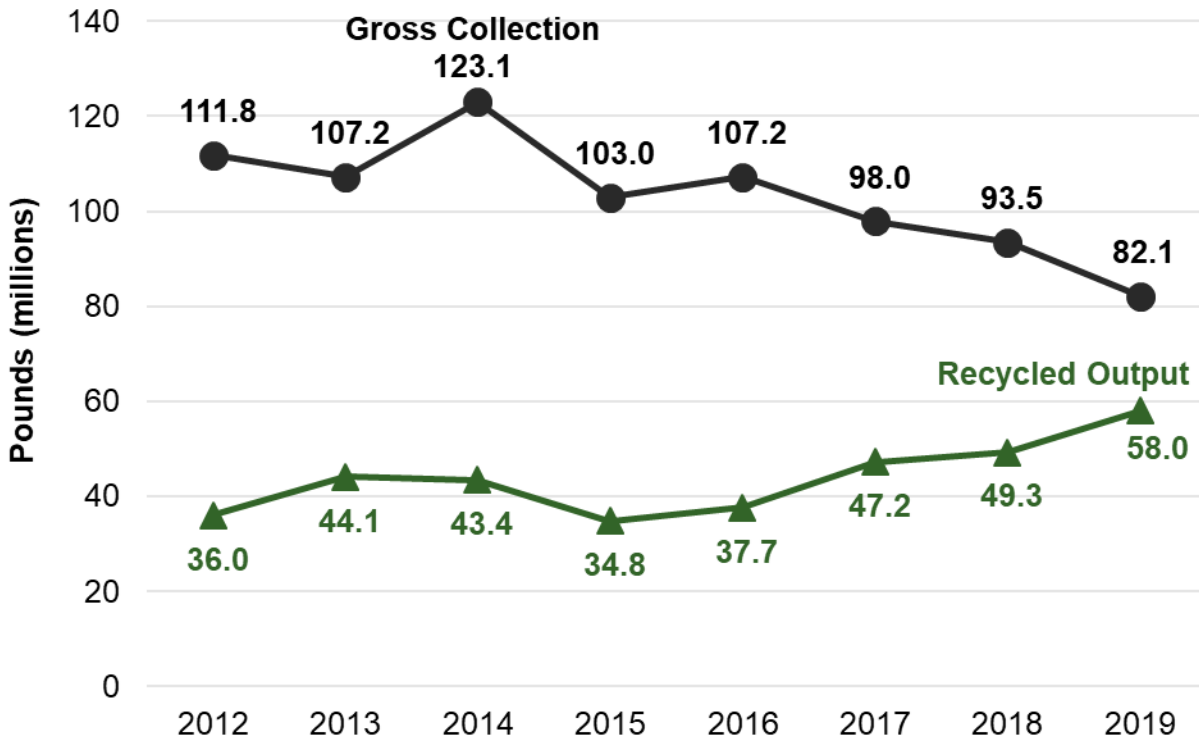
The primary driver for the initiation of collections from carpet retailers and related flooring contractors has been the sale of new carpet. A related, and growing, driver is the sale of hard surface flooring as consumers continue with the design trend transition from soft to hard surface flooring. Tenant Improvements (TI) and Demolition in the commercial sector are also collection drivers; however, the degree to which it contributes to recoverable generation is presently unknown as all direct donation for reuse to organizations such as Habitat for Humanity is not reported to CARE and TI/Demo often includes significant dirt, dust or moisture which renders much of the carpet nonrecyclable. High labor costs are often cited as the key limiting factor reason in relation carpet not being removed prior to total TI or demolition work.

As new carpet sales continued their ongoing quarter over quarter decline, collections relatedly declined. According to a November 18, 2019, [Floor Covering Weekly article](#) on industry reporting on industry trends, “Manufacturer sales were sluggish during 2019 due to an overhang of inventories accumulated from the rush to import Chinese-made flooring in late 2018 to beat rising tariffs, the report stated. At the same time, demand was adversely affected by a weak housing market caused by rising interest rates in 2018. As a result, the residential replacement market could decline during 2019.” That reporting correlates with an overall drop in Gross Collections despite an expanded number of private collection sites and CARE public Drop-off Sites. An earlier than seasonally anticipated drop in supply created a challenge as demand for PCC products, especially PET grew. With declining carpet sales and a need to increase the recycled output, collections need to grow significantly—through both private collections at both smaller volume locations and more hard surface retailers, as well as public drop-off

⁴ Gross collections figures in 2019 include collections facilitated by both participating CSEs through their private collection network (71.8 million pounds), as reported to CARE through monthly reporting, and the CARE public Drop-off Sites (10.2 million pounds). Gross collections may be estimated based on average weights, while disposition figures are based on precise weights of materials managed.

sites. A key component of this expansion will be expanded outreach to retailers as well as both soft and hard surface installers in an effort to increase participation in carpet recycling.

Figure 5-2. Performance Over Time for Gross Collections and Recycled Output



*Figure Notes: **Gross Collection** applies a new calculation methodology beginning in 2017 to avoid potential double-counting of pounds shipped domestically and reported by participating processors. Figures previously reported for prior years are unchanged.*

***Recycled Output** includes Reuse plus Type 1, Type 2, and PC4 (used as a raw material) recycled output pounds. Pounds diverted from landfill through international shipments, or via energy recovery (CAAF and/or Kiln and WTE) are only reported within pounds diverted.*

Since the Program’s inception in July 2011 through the end of 2019, a cumulative total of 875 million pounds of PCC (30% of discards) has been gross collected to date. Of this material, 363 million pounds or approximately 41% of gross collections were converted into recycled output since July 2011. Over the same period, nearly 77% of gross collections were net diverted from landfill totaling an estimated 672 million pounds, inclusive of recycled output. Of the pounds collected, approximately 23% were sent back to the landfill as PCC that could not be recycled (e.g., small pieces, unidentified polymers, contaminated, mixed fibers, dirty loads) or as processing waste.

Despite the decline in gross collections, it should be noted that recycled output efficiency (yield) has continued to climb and in 2019 exceeded 70%. The bulk of this gain is from enhanced processing, screening, and subsidies tied to PC4.

5.5.1 Gross Collection Activities

To improve collection by Collector/Sorters, increase program awareness, and encourage participation, the Program implemented and/or continued the following gross collection activities:

- Recycling coordinator outreach, including meeting with 32 **local government** and private waste facility representatives throughout the state to distribute promotional materials and support increased collections.
- Extensive local government outreach, resulting in 22 **new drop-off sites** supporting 8 new participating counties.
- Expanded total public drop-off sites to **73 participating** drop-off sites in 2019, an increase of 38% from 2018.
- To increase on-site collections at retailer locations and/or drive collections at nearby Drop-off Sites, **conducted 650 in-person visits** promoting new drop-off sites in each region, as new sites launched throughout the term (see Section 8.3).
- Distributed promotional materials to over **40% of the estimated 5,600 California installer/contractors** via 63 tabling events to increase installer program awareness and available recycling options.

In 2019, the Program continued to make significant progress in outreach and engagement with stakeholders involved in carpet collection. Expanded detail on these activities can be found in Chapter 8.

5.6 Disposition

CCR Section 18944(a)(5)(A)5. Disposition, that is, amounts reused, recycled, incinerated for energy recovery or disposed of in a landfill; of collected post-consumer carpet, by pounds, during the reporting period.

Reported disposition of carpet collection in 2019 includes reuse, recycling (recycled output), energy recovery, exports, and environmentally safe landfill disposal. All data presented in this section is based on data from Collector/Sorters (CSEs), Tier 1 processors, Tier 2 manufacturers, and carpet mills submitted to the California Program and its third-party accounting firm (Aprio) and does not reflect any disposition activities occurring outside the Program. National data are provided by Program members, as reported in CARE's annual survey. (Disposition is summarized in Section 4.11.)

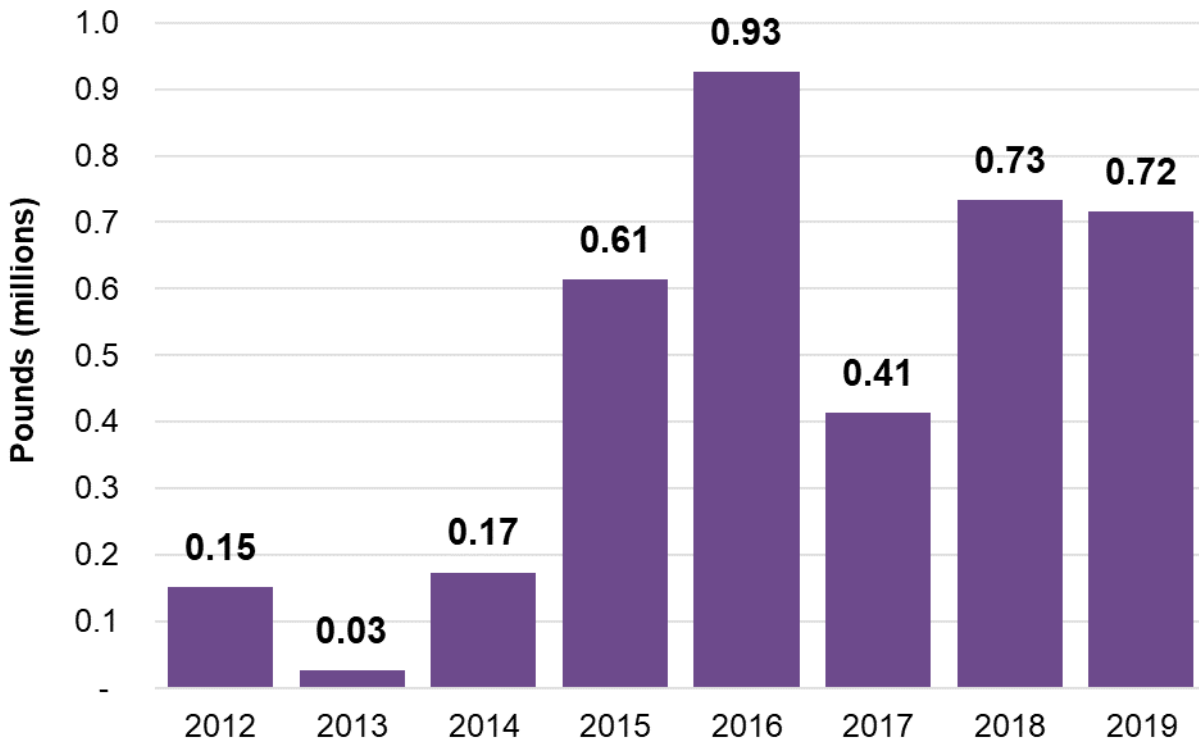
5.6.1 Reuse

Reuse represents a small portion of total annual carpet discards and historically has been difficult to track reliably. The carpet tile/broadloom reuse subsidy put in place in 2015 was aimed at CSEs and Tier 1 processors. During 2019 there were 6 key CSE stakeholders serving on the front lines of carpet and carpet tile recovery and are best positioned to sort materials and identify best opportunities for reuse over recycling. However, it is widely known, through basic online research for used carpet tile (e.g., eBay, Craigslist, OfferUp) as well as contractor direct to readily available outlets such as Habitat for Humanity, that reuse pounds tracked under this subsidy does not reflect all the reuse occurring in the carpet ecosystem.

The \$0.10 subsidy for carpet and tile reuse (initiated in 2015), along with the \$0.05 tile reuse/recycling pilot subsidy added in 2018, supports reuse and enables the Program to report on reuse quantities supported by these subsidies. Reuse in 2019 totaled 716,819 pounds, about a 2% decrease from 733,701 pounds in 2018 (see Figure 5-3). Reuse in 2019 represented 0.87% of gross collections and 0.24 % of discards.

CARE expected to see a significant increase in carpet tile reuse, as well as recycling with the notification that an experienced flooring industry professional and former carpet recycler would be locating their CSE tile collection operations in Southern California. However, business growth efforts around materials sourcing has been slower than anticipated. Planet Recycling, an Arizona-based carpet collector, in partnership with Interface, energized their carpet tile processing operation after overcoming equipment challenges. Inventory sorting for recycling did lead to a boost in carpet tile for reuse as well. Their operation is now lined-out, running well and expected to contribute significant tile reuse and recycling growth in 2020.

Realizing that stockpiles of previously owned carpet tiles at used materials locations such as Habitat for Humanity, etc., can create a logjam in the reuse flow stream, CARE has offered to provide PR and marketing assistance in an effort to increase sales opportunities such that more carpet tiles for reuse can be delivered to locations. To date, no offers have been taken up.

Figure 5-3. Reported Reuse Over Time

The standard size of carpet tiles and the ease with which various styles and colors can be mixed and matched were also factors in making tiles desirable for reuse applications. Carpet tile reuse rose about 3% to 593,353 pounds in 2019 from 576,774 pounds in 2018. Of the reported carpet reuse in 2019, 83% was carpet tile.

Broadloom carpet is more challenging to reuse than carpet tile because it is typically cut to size; often cut into smaller segments to ease removal; comes in many colors, designs, and styles; and can be hard to clean (especially pet stains) or refurbish. However, there are some opportunities for reuse, especially when the carpet is relatively new and has experienced low traffic. While local community organizations like Habitat for Humanity may install gently used carpet such as from trade shows that use carpet for only a few days or weeks, reuse demand for broadloom carpet has been inconsistent over time.

In 2015, the California Program reported its first pounds of broadloom carpet sold, donated, or shipped for reuse totaling 33,220 pounds or 5% of total 2015 reuse. In 2019, broadloom carpet reuse totaled 123,466 pounds, an 11% decrease from 156,927 pounds in 2018.

In response to decreased reuse in 2017, the Program introduced a new collector/sorter-based pilot subsidy effective January 1, 2018, targeting carpet tile—the most readily reusable portion of the PCC waste stream. The pilot subsidy offers an additional \$0.05 per pound for carpet tile collected, sorted and shipped, and sold or donated for either

reuse or recycling. As noted above, carpet tile reuse rose to 593,353 pounds in 2019, its highest level to date.

5.6.2 Recycled Output

Recycled output includes the portion of gross collected PCC after processing (e.g., shredding, hammer-milling, and de-polymerization) that is shipped and sold as material to be used in manufacturing new or secondary products made with post-consumer recycled carpet content. The Program's recycled output is calculated as the sum of all Type 1 and Type 2 recycled outputs (including PC4 and carcass), plus reuse. It is worth noting that Type 2 recycled output has been essentially zero for the last few years as there is little value in this class of material. 2019 saw <250,000 pounds reported Type 2.

Recycled output for 2019 reached an historical high of 58 million pounds, an 18% increase from the 49 million pounds reported for 2018. This increase was realized despite the loss of two major outlets for PET (including decking lumber) and PC4 during significant portions of 2018, as well as the previously noted processor capacity opening and expansion challenges. Those markets were subsequently replaced with new long-term contract outlets. Recycled output as a percentage of total discards (recycling rate) increased to 19% in 2019, up from 15% in 2018 (see Table 3-1). Beginning in Q2 2019, the Program reached its highest quarterly recycling levels to date, exceeding the previous quarterly high of 16.3% (Q2 2018). In 2019, the quarterly recycling rate reached 18.4% in Q2, 19.9% in Q3, and a new high of 22.5% in Q4. Since the Program's inception in July 2011, a cumulative total of 363 million pounds of PCC (12.5% of discards) have been recycled. Further information about the efforts to increase recycled output can be found in Section 5.8, *Increasing Recycled Output*.

A major new positive impact on Recycled Output is the development of PET fiber into agglomerated pellets (shown in right-hand image below) which are committed to a large-scale chemical recycling end market outlet converting the material to ultimate end product uses such as textiles, ophthalmic eye wear frames, tool handles, automotive clear coats and other consumer product packaging.



PET fiber (left) and PET agglomerated pellets (right).

As noted, in Q3 2018 CARE received notice that a major manufacturer of manufactured decking lumber, which consumed a significant volume of PET from California, had sold their operations. While the post-consumer PET PCC recycled-content product line was not included in the sale, a non-compete clause prevented the ongoing manufacture and sale of this high-volume PCC product. The plant was to be reconfigured to make a new type of building products with the expectation that demand for PET fiber will be reestablished in the second half of 2019. Continued technical issues and equipment modifications have further delayed this restart and as of the end of 2019, the plant was still not operational. The latest estimate is that start-up is now expected in the second half of 2020.

5.6.3 Incineration

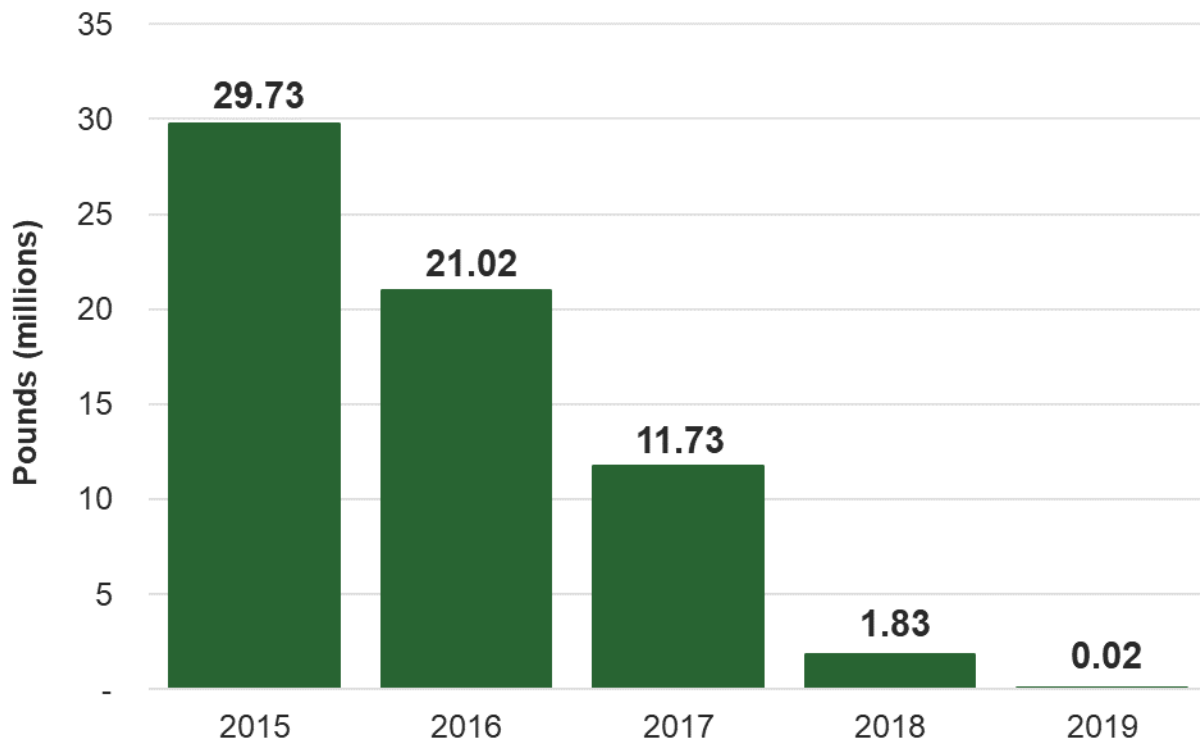
No incineration was reported in 2019, nor since the Program began.

5.6.4 Energy Recovery

The California Carpet Stewardship Plan 2018–2022, under which this report is developed, supports the management of post-consumer carpet in a manner consistent with the state’s solid waste hierarchy and AB 2398 requirements. Two categories of energy recovery methods were used in the past to help manage PCC not diverted through reuse, recycling, or international sales: Carpet As Alternative Fuel (CAAF) and Kiln, which refers to the use of PCC as a fuel substitute in cement kilns and other high-temperature processes. While both of these categories qualified for subsidies under the previous 2011–2016 Plan, CARE discontinued subsidies for both CAAF and Kiln at the end of 2017. Accordingly, no subsidies were paid for CAAF or Kiln in 2019, and CARE has never paid a subsidy for Waste-to-Energy (WTE), the process of recovering thermal energy from PCC through combustion. Although WTE is not supported by Program subsidies at this time, it does provide an alternative to landfill for unrecyclable portions of the PCC waste stream.

Energy recovery continued to decrease in 2019, in line with the Program’s goal to increase materials management methods higher in the waste hierarchy. The amount of PCC going to energy outlets dropped to 19,061 pounds in 2019, down from 1.83 million in 2018, a 99% decrease (see Figure 5-4). In 2019, energy recovery represented only 0.03% of net diversion, down from 2.6% in 2018.

Figure 5-4. Energy Recovery Over Time



CAAF and Kiln

Subsidies for CAAF and Kiln were discontinued at the end of 2017. In 2019, CAAF and Kiln rose slightly from their zero levels in 2019, with 1,720 pounds of carpet handled through CAAF and 17,341 pounds going to Kiln (see Table 5-2).

Waste to Energy (WTE)

WTE decreased from 1.8 million pounds in 2018 to zero in 2019, a 100% decline (see Table 5-2). PCC disposed as WTE is typically unusable material resulting from the recycling process that would otherwise be sent to the landfill. Although WTE is not considered recycled output, it can be viewed as PCC diverted from landfills inside and outside of California. WTE is not part of the subsidy program but is considered by the Program to be higher use than going to the landfill. Collected material sent to landfill also decreased in 2019, as noted below.

Table 5-2. Energy Recovery by Method (in millions of pounds)

Use	2018	2019	Change	Change (%)
Kiln	0	0.017	+0.017	N/A
CAAF	0	0.002	+0.002	N/A
WTE	1.832	0	-1.832	-100%

5.6.5 Disposal

Disposal is calculated as the balance of discards (304 million pounds) minus gross collections (82 million pounds), plus net sorting and processing waste sent to landfill (16.1 million pounds). With the passage of AB 1158, a review on discards calculation was proposed in the 2018–2022 Plan. For this report, the formula for discards calculation remains unchanged (see Section 5.13.1 for details).

In 2019, total PCC waste disposal to landfill was 238 million pounds, down 5% from 251 million pounds in 2018. (Note that some additional diversion may be occurring due to untraced reuse or other upstream processes outside the Program’s reporting process. This diversion may have a slight impact on the actual pounds sent to landfill.)

In 2019, Tier 1 processors reported the total processor pounds sent to landfill for disposal as 16.1 million pounds, down 31% from 23.2 million pounds in 2018 (see Table 3-1). Materials sent to landfill are generally classified as unusable PCC materials collected during the gross collections process or generated as an unusable byproduct of production or processing that is not converted to recycled output or managed through an energy recovery, CAAF, Kiln, or WTE utilization process.

5.7 Increasing Recyclability

CCR Section 18944(a)(5)(A)6. Describe efforts to increase recyclability of carpets.

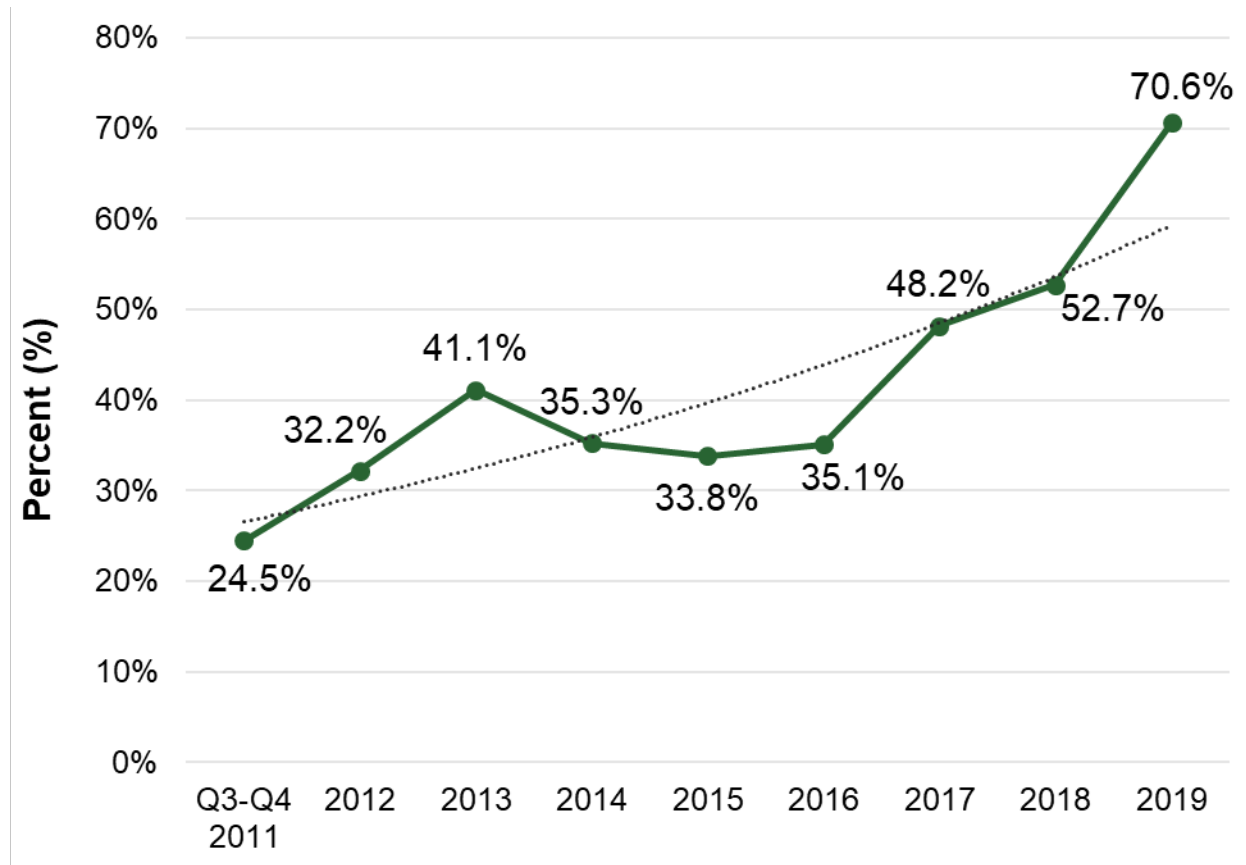
Yield is calculated as the ratio of gross collections converted into recycled output, expressed as a percentage of gross collections. Yield serves as the primary metric used to measure changes in recyclability, which refers to how easily carpets can be separated into their component parts and ultimately recycled. As yield increases, a higher percentage of gross collections are converted into recycled output, indicating an increase in overall recyclability of PCC collected. Increased yield is currently driven primarily by improvements in downstream collection and processing efficiency, as well as technology innovations improving recycled output performance and development of new secondary products.

In addition, many carpet mills continue efforts to increase recyclability at the source of manufacture, which may serve to further benefit carpet recyclability in future years. Example actions taken by carpet mills that may provide benefits for source reduction and/or increased recyclability are summarized in Section 5.4.1. An industry-funded, voluntary back-stamping initiative led by CRI began in 2015 with the goal of full adoption by the end of 2016 is estimated it covers approximately 94% of carpet sold in California. These labeling improvements are designed to identify material types and continue to increase recyclability of PCC over time. The status of this initiative is discussed in Section 4.1.

Overall recyclability as indicated by yield increased this year to 71% of gross collections, up from 53% in 2018 (see Figure 5-5). This rate is the Program's highest to date and a substantial increase over the historical average of 38.4% from 2011–2018. Finding ways to reuse or recycle all components of a square yard of carpet is key to increasing yield. A key contributor to this yield improvement involved finding outlets for calcium carbonate from post-consumer carpet (PC4). The Program continues to expand understanding of how to use these materials in a safe and effective manner, which is an evolving process with regard to science, technology, and regulations. CARE initiated studies at both the University of California at Davis and Humboldt State University (working with GHD Engineering) to gain further insights. That work has been published on CARE's website, shared in an E-news. Following are links to the [Report](#) and related [Appendices](#). As knowledge and understanding expanded, CARE worked to develop draft guidelines focused on in/on-ground applications of PCC materials. The draft guidelines were released in September 2019 and published on the [CARE website](#). The Program expects that as recycling of backing materials continues to increase (PC4) and processor sifting processes improve, yield will continue to rise.

Figure 5-5 indicates a steady increase in recycled output percentage, and the dotted line represents an exponentially weight curve fit supporting that conclusion. The increase is driven by the expanded use of PC4, thus avoiding that material being sent to landfill. It is worth noting that the PC4 subsidy is between 8 to 17 times that of the value of virgin calcium carbonate based on market feedback on what it takes to move this recycled material.

Figure 5-5. Percent of Gross Collections Converted to Recycled Output (Yield)



Under the Program, CARE historically has relied on carpet mills as the primary driver for major design changes and improvements in the recyclability of carpet and carpet tile. Such developments are considered long-term and will take years to manifest in the marketplace. Once the new carpet is introduced into commerce, it takes another period of time, typically 5 to 20 years, to show up in the recycle stream. The Program’s recyclability efforts in 2019 continued to focus on increasing yield and supporting development of secondary products that use recycled outputs, primarily through technical assistance to Collector/Sorters, Tier 1 processors, and Tier 2 manufacturers. In addition, CARE works to identify, qualify, and report on technologies that will improve carpet recyclability over the long-term, including working with mills to increase recyclability and source reduction.

Of the gross collections of carpet in 2019, Tier 1 processors reported the percentage of each polymer by type. Percentages by fiber type remained fairly similar in 2019 to 2018 levels, with changes of only 1 to 2 percentage points up or down (see Figure 5-6). PET fiber represented the largest share, with nearly half of gross collections at 49% in 2019, as buyers continued to embrace more affordable PET carpet. Nylon 6 was the next largest portion, with approximately one-quarter of gross collections, at 26% in 2019. Nylon 6,6 represented 13% in 2019, and polypropylene was 8%. Wool (0.2%) and other/mixed fibers (4%) remain low and relatively insignificant portions of the PCC waste stream. Note that the face fiber percentage breakdown is estimated and may vary based on which fibers move in the recycle marketplace.

Beginning in late 2017, CARE began tracking Type 1 recycled output by fiber type with the launch of the new nylon 6 Tier 2 manufacturer subsidy, providing CARE with a better understanding of nylon 6 recycled output demand as a feedstock for new recycled carpet products. In 2019, California sales of new carpet by face fiber ranged from approximately 39% PET (no change); 37% nylon 6 (down 2 points); 12% nylon 6,6 (up 4 points); 5% polypropylene (down 1 point); and 7% (down 1 point) other and mixed and natural fibers.

5.7.1 Key Plan Drivers on Recyclability and Closed-Loop Recycling

CARE presented in the 2018–2022 Plan a commitment to continue encouraging mills to increase recyclability and closed-loop recycling approaches. Two foundational Processor facility developments discussed were:

- 1) A new facility anticipated to come online in mid-2018 which committed to focus specifically on the recycling of N6 from broadloom carpet. The intent expressed was expanding both N6 broadloom fiber recovery and tile processing for California beginning in 2019.
 - a. Status: This facility, XT Green, supported with a CARE equipment grant, has experienced extraordinary delays impacted by China trade war and tariffs, power provision challenges and most recently Wuhan, China, production shutdowns due to Covid-19. As of year-end 2019 this facility had power service upgraded; however, no equipment has been installed and was not operational.
- 2) A fiber producer committed to recycling N6 in Phoenix with plans for additional capacity in California for 2019.
 - a. Status: The Aquafil Phoenix facility is operational in their production of whole Nylon 6 carpet and N6 fiber; however, unanticipated operational challenges have resulted in capacity output at less than half of that which was projected. It is known that carpet fibers processed at this facility are ultimately processed and recycled into their post-consumer

carpet recycled ECONYL® yarns along with other nylon 6 products which is Aquafil reports is utilized by more than 100 carpet manufacturers in Georgia.

The \$12 million 36-million-pound capacity California facility, with partially CARE grant funded equipment installed, was expected to be operational by June 2019 with 50 new jobs; however, due to the devastating Northern California wildfires, PG&E has not yet been able to deliver full power to fully energize the facility. It is hoped that this facility will be operational in Q3 2020, more than a full year after planned opening.

Each of these operations were considered to be important in supporting efforts to grow and expand closed-loop recycling of carpet fiber to carpet fiber and were a strategic element in the strategy to reach 24% by the beginning of 2020. Had any one of these operations come online as scheduled and met design capacity, the RO would have met or exceeded the target. If all had become operational, CARE would have reported a dramatic increment above 24%. Despite CARE grant funding and/or technical assistance offered, these are not CARE-run facilities, thus are not under CARE's control. A number of factors outside the control of the recyclers, CARE, and CalRecycle were at play. CARE continues to stay as proactively engaged as is feasibly possible in efforts to support facilities as they are becoming operational and provide greater overall capacity and closed-loop recycling materials to benefit the manufacture of carpet.

Figure 5-6. Reported Percent Fiber by Type in Gross Collections Over Time

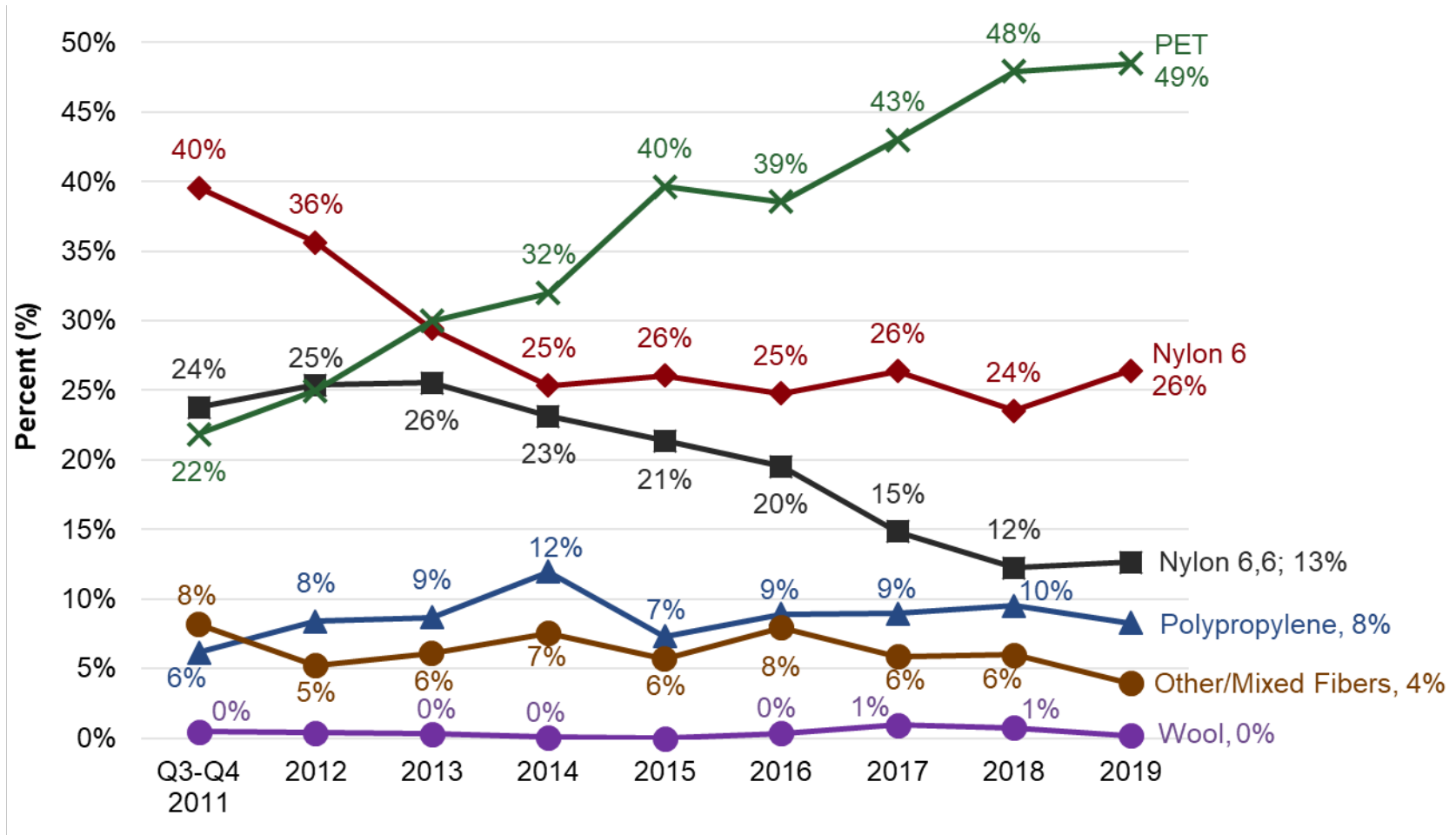
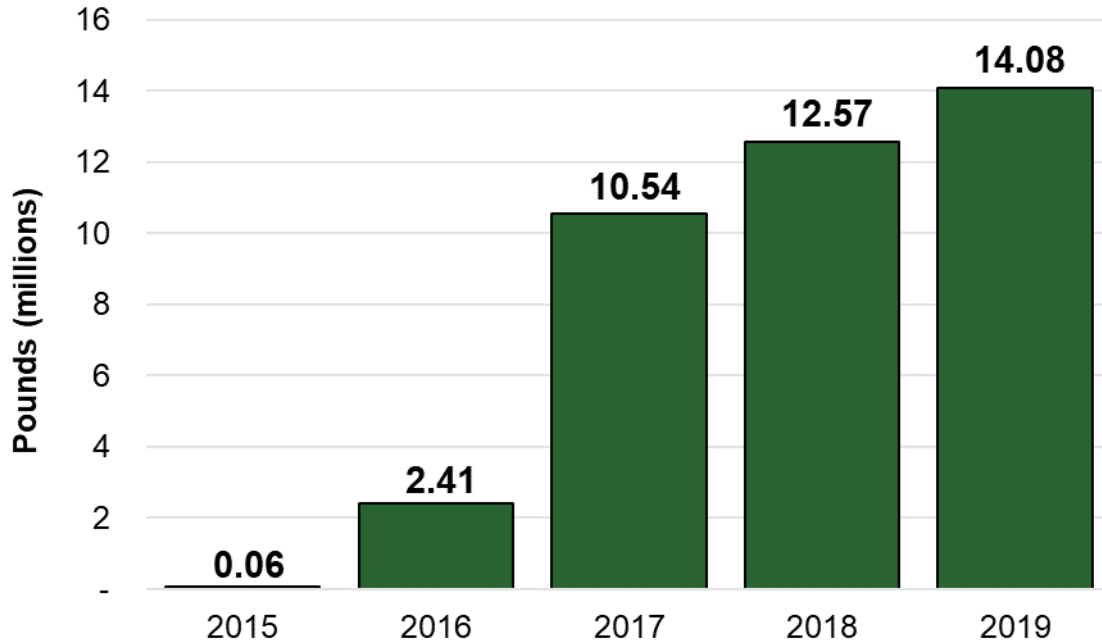


Figure Note: Data is based on reported estimated collection percentages by recyclers of California PCC. The private collection network does not weight inbound goods as there is no value in the time or money to do this. Data may also be skewed in some reporting due to preferential selection of higher-value fiber types.

In 2019, the Program continued its efforts to increase the portion of gross collections converted and used as recycled output through the incentives described below.

PC4 Subsidy. The PC4 incentive continued the increase of PC4 recycled output, with 14.08 million pounds recycled in 2019, up 9% from 12.57 million pounds recycled in 2018 (see Figure 5-7).

Figure 5-7. Calcium Carbonate (PC4) Pounds Over Time



Grant Program. The impact from grants implemented in Cycle 1 (2016–2017) continued to support increases in recycled yield from raw carpet both directly and indirectly. Secondary products from companies such as SafePath Products and Sierra Mat & Rubber continue to incorporate PC4, and new products have also been in development. Similarly, the PC4 processing grant to Circular Polymers has supported their continued expansion of end market opportunities for various grades (by screening) of PC4 materials.

Cycle 2 grants were issued in October 2018, following a pause while the Plan was being rewritten and CalRecycle denied CARE’s request to allow grant funding release. This effectively delayed planned PCC collections and additional recycled output until 2019. The grants were evaluated through expanded scoring criteria that incorporated the AB 1158 requirement of Highest Recyclability. Eight capital grants of approximately \$2.5 million, six product testing grants of approximately \$1 million, and six micro-grants of approximately \$15,000 each were awarded. Expanded grants discussion can be found in Chapter 6, *Market Development*.

In 2019, Cycle 3A of capital grants was introduced and funded six projects for a total of over \$1.5 million. All six projects were intended to establish or expand operations between Q4 2019 and Q3 of 2020.

1. **Technical Assistance.** Product development work, based on the concept of feedstock conversion, continued in 2019. This work involves adding PCC material into the recipes of existing secondary products, displacing rubber or plastic to reduce the product cost, improve the scent, or increase performance. Because carpet backing material accounts for about 40% of carpet weight, efforts continued to focus on finding uses for PC4 and a variety of other materials. Technical assistance continues to involve providing support for potential new processors, and manufacturers to join the Program, understand the subsidy and incentive structure, improve the quality or quantity of recycled output and/or move into new product markets (see Chapter 6, *Market Development*).
2. **Highest Recyclability Processor Subsidy.** With the implementation of AB 1158, requiring definition and incentivizing those materials determined to meet Highest Recyclability criteria, a new Processor subsidy was introduced.
 - *Highest Recyclability Subsidy:* In Q1 2019 CARE introduced a \$0.05 per pound Processor subsidy consistent with the provision that, “Any grants or subsidies provided for the recycling of postconsumer carpet shall be structured to incentivize the recycling of carpet materials that have the highest recyclability.” Current materials meeting the defined criteria scoring (see Section 5.16.1) are Nylon 6 and Nylon 6,6 and carpet tile. Processor pounds of Nylon 6 in 2019 increased 30% over 2018, and Nylon 6,6 pounds increased 19% for the same period. However, based upon the increases reviewed from 2017 to 2018, it is hard to definitively say that the H.R. incentive is what moved more Nylon material as it is a material group which has historically had its own high market value. It can be stated anecdotally that there was an increase in the recovery of commercial Nylon broadloom which has a lower recovery rate due to its low fiber yield and often continuous loop construction, which significantly slows production. Similarly, a 28% increase in carpet tile recycling was also reported.
 - It is worth noting that CARE anticipates the definition of H.R. will be refined based on market developments and the advent of chemical recycling.
3. **Recycled Product Manufacturer Subsidies.** Starting in 2018, the Program modified the two subsidies offered for manufacturers of recycled products containing PCC recycled output, in effort to provide further fiber type detail.

- *PET/PTT and PP (formerly known as Non-Nylon collectively) Recycled Product Subsidies:* Since the Program began in 2011, the Program has experienced growth in PET carpet discards. The \$0.25 per pound subsidy has continued to have a positive impact on recycled product use of non-nylon material in secondary products. Despite the 2018 loss of a major PET outlet to decking lumber, two significant PET fiber and new agglomerated pellet outlets have come online. A secondary contributor to the drop in 2019 pounds was the discontinuation of convention carpet (PP) processing by a major events supplier. PET/PTT and PP totaled 19.1 million pounds in 2019, down 12% from 21.6 million pounds in 2018 (see Figure 5-14 on page 124).
- *Nylon 6 (N6) Recycled Product Subsidy:* Launched as a pilot in 2017, the Tier 2 manufacturer subsidy for nylon 6 supports recycled output used in the manufacture of recycled products. With approval of the 2018–2022 Plan, the nylon 6 subsidy was made permanent.

5.8 Increasing Recycled Output

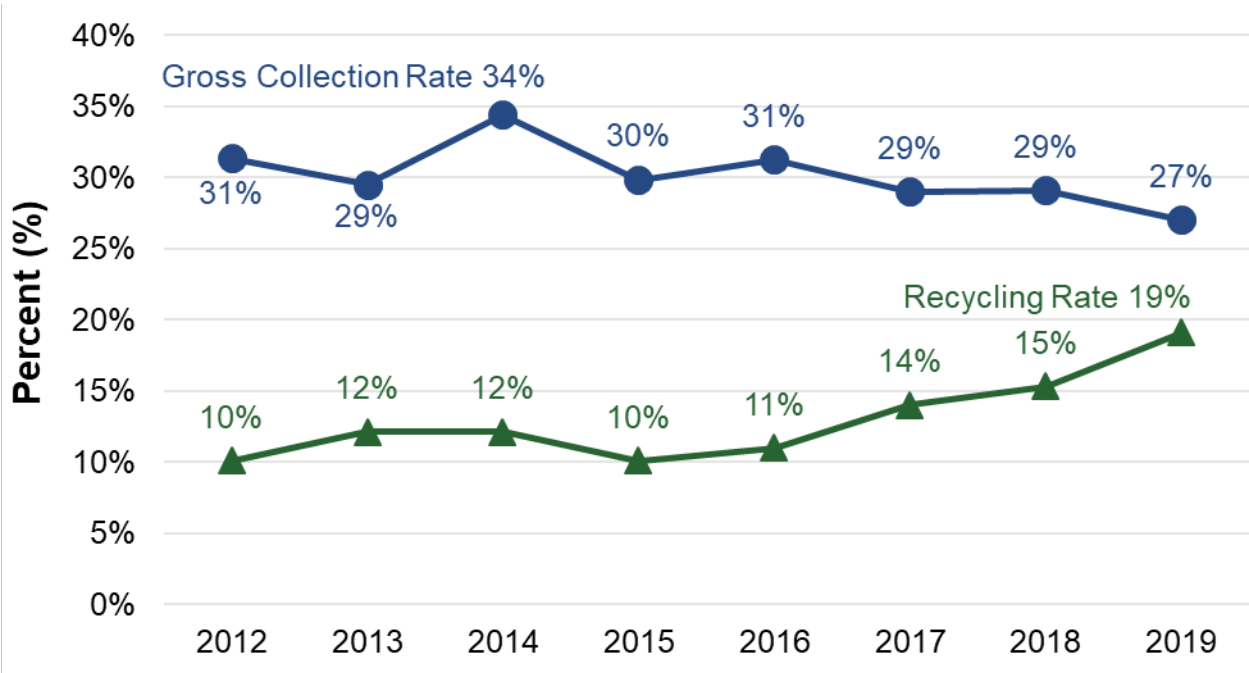
CCR Section 18944(a)(5)(A)7. Describe efforts to increase recycling of post-consumer carpet.

Recycled output composes the portion of gross collections that is successfully converted from PCC to an end-use product, or feedstock for a secondary product. The Program uses a subsidy structure that compensates Tier 1 processors based on the number of pounds of materials converted to recycled output, and Tier 2 manufacturers based on how much recycled output they use in their recycled-content products. These subsidies play an important role in stimulating short-term growth as well as stabilizing the overall industry during times of change.

The Recycling Rate (recycled output as a percentage of total discards) increased to 19% in 2019, a 26% increase from 15% in 2018 (see Figure 5-8). Beginning in Q2 2019, the Program reached its highest quarterly recycling levels to date, exceeding the previous quarterly high of 16.3% (Q2 2018). In 2019, the quarterly recycling rate reached 18.4% in Q2, 19.9% in Q3, and a new high of 22.5% in Q4. Since the Program's inception in July 2011, a cumulative total of 363 million pounds of PCC (12.5% of discards) have been recycled.

Reiterating a prior narrative, had any of several grant supported processing operations come online as planned in 2019, the reported recycling rate in Q4 would have easily met or exceeded 24%,

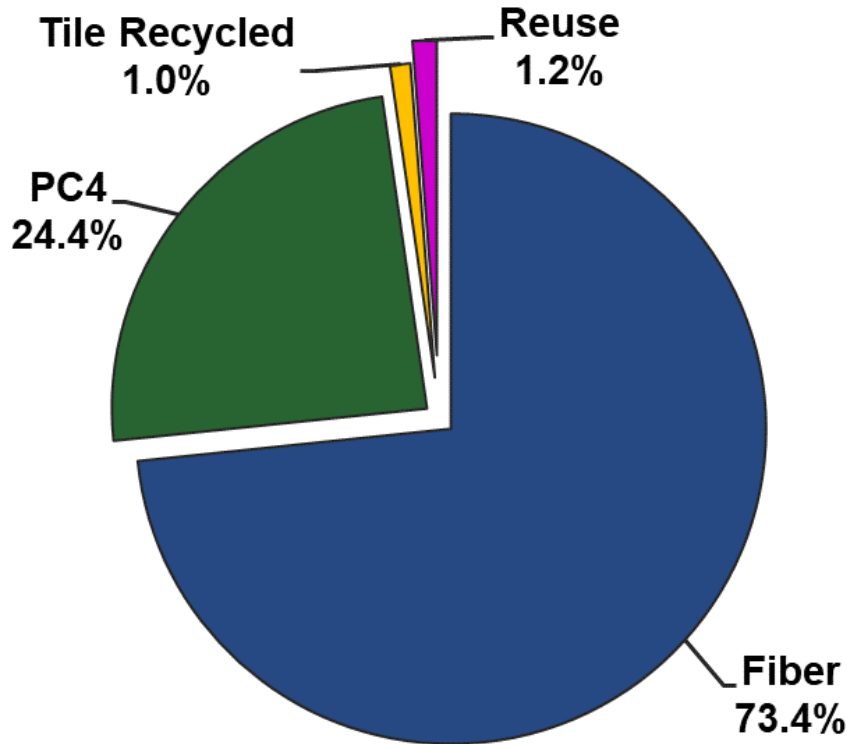
Figure 5-8. Gross Collection Rate and Recycling Rate Over Time



As described in Chapter 6, grants since 2017 have helped expand recycled output in California, though declines from other processors and manufacturers have slowed the growth. Overall, approximately 56% of all gains in new recycled output in 2019 were offset by lost throughput over the same period (see Figure 4-9). As markets continue to develop, new recycled output capacity holds promise for increased recycled output in future years. The Program continues to offer support in the form of subsidies and other incentives to enable and accelerate growth in recycled output, especially within the State. Grant Cycle 2 (late 2018) and Cycle 3 (2019) are contributing significantly to this growth. Recycled output is the sum of all Type 1 + Type 2 + PC4 recycled output, plus reuse. The primary components of recycled output in 2019, as illustrated in Figure 5-9, include Fiber (73.4%), PC4 (24.4%), Carpet Tile (1.0%), and Reuse (1.2%). Depolymerization and Filler were zero in 2019, and Carcass was 0.4%; they are not shown in the figure below.

$$\text{Recycled Output} = \text{Type 1} + \text{Type 2} + \text{PC4 Recycled Outputs} + \text{Reuse}$$

Figure 5-9. Recycled Output Components



The largest component of recycled output continues to be fiber, at 73.4% of total recycled output in 2019. Pounds of fiber increased to 42.4 million pounds, up 19% from 35.5 million in 2018. Increased processing efficiency and market uses for PC4 helped support an overall increase in Recycled Output.

The second largest component reflects the growing market for PC4 backing material, which grew from only 0.2% of recycled output in 2015 to 25.5% in 2018 and 24.4% in 2019. Despite the slight decrease in share of recycled output, the overall quantity of PC4 continued to grow, reaching 14.1 million pounds in 2019, up 13% from 12.5 million pounds in 2018 (see Figure 5-7 on page 107). The PC4 subsidy of \$0.17 per pound for Tier 1 processors, combined with grant awards and technical assistance, continued to support ongoing growth in the number of PC4 pounds recycled.

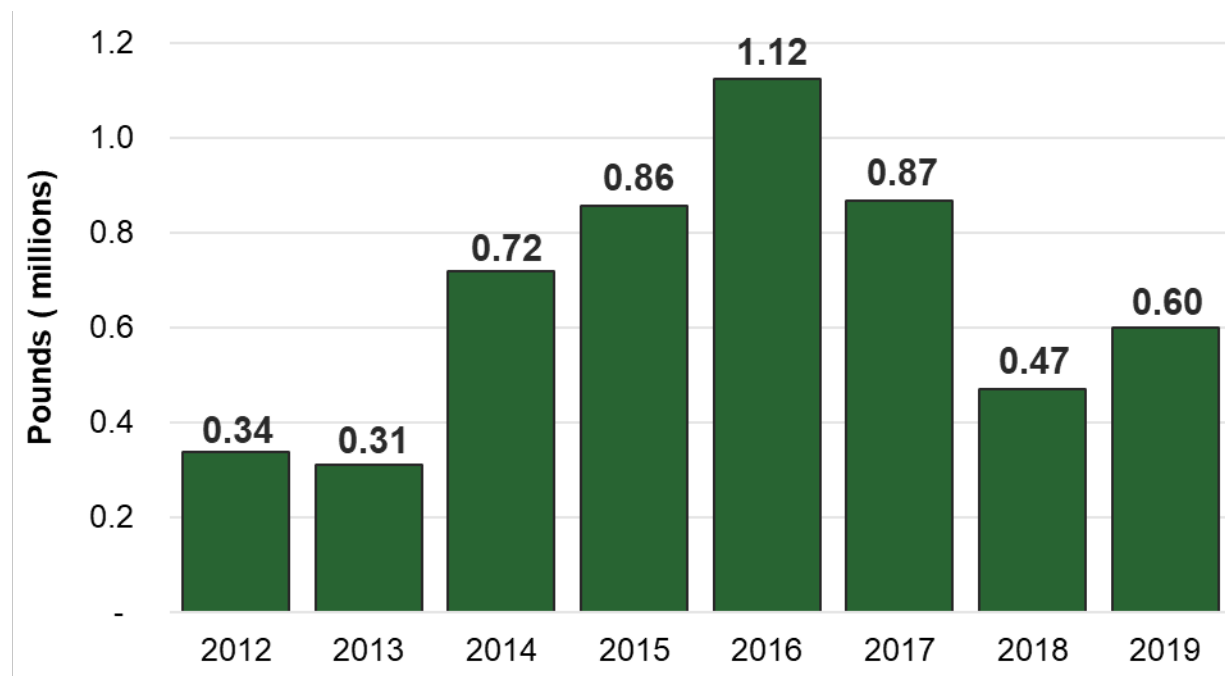
The remaining components included carpet tile recycling and reuse. Recycled carpet tile made up 1% of 2019 total recycled output, the same as in 2018. The Program's subsidy for carpet tile recycling has been in place since 2015, and carpet tiles typically offer a higher level of recyclability than other carpet products. Carpet tile recycled increased in 2019 to 599,326 pounds (+28%), up from 469,215 pounds recycled in 2018 (see Figure 5-10).

A significant increase in carpet tile recycling had been anticipated with support of a Cycle 2A grant to Interface and projected to consume more than 10 million pounds of California carpet tile; however, delayed release of grant funding until Plan approval and unanticipated technical issues delayed tile processing start up. It is anticipated that full capacity production and significantly increased carpet tile processing will be realized in 2020.

Reuse made up the remaining 1.2% of recycled output in 2019, compared to 1.5% in 2018. Reuse in 2019 totaled 716,819 pounds, about a 2% decrease from 733,701 pounds in 2018 (see Section 5.6.1 and Figure 5-3). The addition of a new Southern California collector/sorter, focusing on carpet tile, was expected to provide a noticeable increase both in reuse and recycling of carpet tile during 2019; however, slower than anticipated business development plans provided modest results.

There were no pounds of recycled filler or depolymerization reported in 2016–2019. Carcass, after two years at zero in 2017 and 2018, was 214,303 pounds in 2019.

Figure 5-10. Carpet Tile Recycled (million pounds)



Gross collections and recycled output results over time are described in Section 5.5 and Section 5.8. Subsidies and initiatives for Tier 2 manufacturers are detailed in Chapter 6, *Market Development*.

Table 5-3 below is intended to clarify definitions of **recycled output**, **recycling rate**, and **yield**.

Table 5-3. Recycled Output, Recycling Rate, and Yield Definitions and Metrics

Term	Definition	Metric
Recycled Output (RO)	The sum of reuse or the material that results from the industry recognized processing (shredding, shearing, hammer-milling, depolymerization, etc.) of PCC from a processor. Examples of recycled output include fiber, shredded carpet tile, depolymerized chemical components, carpet filler, PC4, etc. The Program currently distinguishes between two types of material: Type 1 Recycled Output; and Type 2 Recycled Output Material (see Definitions in Appendix 10.12 for further explanation).	Recycled Output increased to 58 million pounds in 2019, an 18% increase from 49 million pounds in 2018.
Recycling Rate	The proportion of carpet discards converted into recycled output, expressed as a percentage of carpet discards. The Program’s recycling rate goal is 16% by 2016 and 24% by 2020.	The recycling rate increased to 19% in 2019, up from 15% in 2018. The quarterly recycling rate reached a new high of 22.5% in Q4 2019, approaching the goal of 24% by 2020.
Yield	The ratio of gross collections converted into recycled output, expressed as a percentage of gross collections; also referred to as gross collection conversion rate. <i>Yield</i> is used as the primary metric to measure changes in recyclability.	Yield increased in 2019 to 71% of gross collections (GC), up from 53% in 2018. This rate is the Program’s highest to date and a substantial increase over the historical average of 38% from 2011–2018. Increased RO, especially PC4, and decreased GC driven by lower sales mean higher yield.

Table Note: Definitions as listed in the attached glossary (Appendix 10.12, Definitions).

5.9 Increasing Overall Diversion

CCR Section 18944(a)(5)(A)8. Describe efforts to increase diversion of post-consumer carpet from landfills.

Overall diversion of PCC from landfills is a principal objective of the Program, especially as technology, infrastructure, and awareness of carpet recycling continue to evolve. Net diversion is defined as the difference between gross collections net of any materials sent to landfill. Materials diverted from landfill include Reuse, Recycled Output (Type 1 + Type 2 + PC4 + Carcass), CAAF and Kiln, WTE, and exported whole carpet. Carpet cushion is excluded from carpet diversion figures but does constitute additional landfill diversion as an auxiliary co-benefit of the Program (see Table 3-1 for pounds of pad diverted). The Program tracks and calculates both net diversion and reported diversion, as described below.

Net diversion is an estimate based on the estimated pounds of PCC collected and reported by recyclers minus the amount of all whole carpet (PCC) and processor waste sent to landfill. In 2019, net diversion was calculated to be 66 million pounds, or 22% of discards and 80% of gross collections. This is a 6% decrease from the 70 million pounds of net diversion in 2018, which was 22% of discards and 75% of gross collections.

Reported diversion is the sum of Reuse, Recycled Output (Type 1 + Type 2 + PC4 + Carcass), CAAF and Kiln, WTE, and exported whole carpet. Cushion is excluded. Net diversion does not equal reported diversion for two reasons. First, gross collections are based on estimates, not actual shipments or sales, while recycled output is based on actual weights. Second, a substantial amount of material may be retained in inventory as whole carpet, processed materials, or other outputs in progress that are not yet accounted for as finished material outputs. In 2019, the total reported diversion (not including cushion) equaled 58 million pounds, a 13% increase from 52 million pounds in 2018. Table 5-4 and Table 5-5 show reported diversion by type and percentage.

In 2019, the largest component of reported diversion was fiber/depolymerization, at about 43 million pounds, or 14% of discards. In 2019, 100% of material in this category was fiber. The second largest component of reported diversion was PC4 recycled output at 14 million diverted pounds (4.6% of discards). With much lower quantities were reuse at 0.7 million pounds (0.2% of discards), recycled tile at 0.6 million pounds (0.2% of discards), exports at 0.5 million pounds (0.2% of discards), carcass at 0.2 million pounds (0.1% of discards), and energy recovery consisting of kiln and CAAF at 0.02 million pounds (0.01% of discards).

Carpet cushion/pad is additive diversion, which is a co-benefit of carpet recycling efforts. In 2019, 8.5 million pounds were reported diverted from the landfill. The

Program indirectly diverts carpet padding or cushion (mainly polyurethane foam, also known as rebound) at several sites where the padding material is accepted with PCC as a separate recyclable material. A market exists for these materials, though it varies. Being able to recycle both co-generated materials at the same time provides drop-off convenience for installers, retailers, contractors, and consumers, which in turn supports program participation and thus carpet recycling.

Figure 5-11 reflects CARE’s success in increasing the diversion of post-consumer carpet from landfills. Capacity expansion, materials processing improvements and end-market development have been key factors that have resulted in Yield improvements and overall increased Recycled Output. CARE’s 2019 Yield rate of 71% results in less material to landfill.

Figure 5-11. Disposal Over Time (Discards Minus Recycled Output)

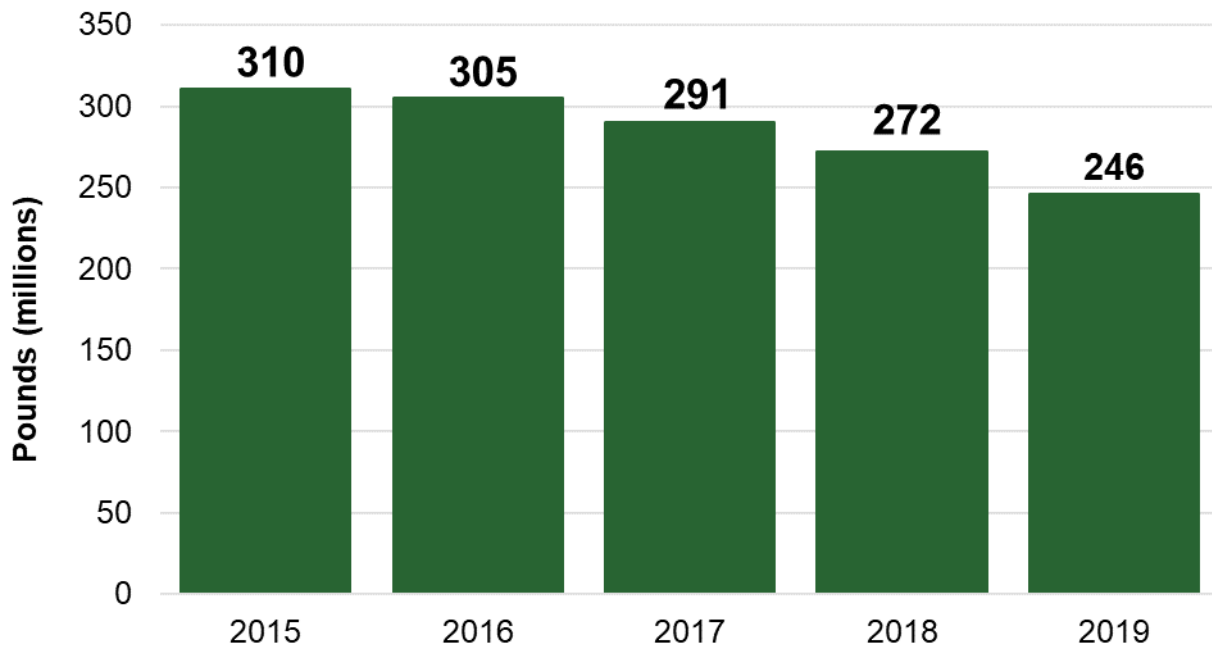


Table 5-4. Reported Diversion by Type (thousands of pounds)

Diversion from Landfill by Type	2011 (Q3+Q4)	2012	2013	2014	2015	2016	2017	2018	2019
Reuse	0	152	26	174	614	926	414	734	717
Tile Recycled	44	336	310	717	856	1,122	867	469	599
Fiber / DePoly	11,486	34,007	43,719	43,397	34,762	34,219	36,288	36,002	42,999
PC4	0	0	0	0	61	2,412	10,538	12,571	14,077
Filler	522	1,983	390	0	0	0	0	0	0
Carcass	0	160	0	0	0	169	0	0	214
Kiln	0	44	48	9,255	6,854	3,417	1,948	0	17
CAAF	0	0	137	0	0	54	17	0	2
WTE	7,444	11,417	20,331	21,311	22,880	17,548	9,762	1,832	0
Exports	1,712	7,953	4,330	11,228	7,846	2,272	2,791	609	467
Carpet Cushion/Pad	692	6,108	2,914	4,804	6,901	6,765	5,894	9,056	8,492

Table 5-5. Reported Diversion by Percentage

Diversion from Landfill by Type	2011 (Q3+Q4)	2012	2013	2014	2015	2016	2017	2018	2019
Total Carpet Discards (thousands of pounds)	181,036	356,977	363,567	357,671	345,197	342,787	337,748	321,587	303,836
Reuse	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.1%	0.2%	0.2%
Tile Recycled	0.0%	0.1%	0.1%	0.2%	0.2%	0.3%	0.3%	0.1%	0.2%
Fiber / DePoly	6.3%	9.5%	12.0%	12.1%	10.1%	10.0%	10.7%	11.2%	14.2%
PC4	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	3.1%	3.9%	4.6%
Filler	0.3%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Carcass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Kiln	0.0%	0.0%	0.0%	2.6%	2.0%	1.0%	0.6%	0.0%	0.0%
CAAF	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WTE	4.1%	3.2%	5.6%	6.0%	6.6%	5.1%	2.9%	0.6%	0.0%
Exports	0.9%	2.2%	1.2%	3.1%	2.3%	0.7%	0.8%	0.2%	0.2%

5.10 Environmental Impacts

CCR Section 18944(a)(5)(A)9. Describe other environmental impacts as data are available, e.g., greenhouse gas emissions. Descriptions of any enforcement actions or problems related to plan implementation.

This section address greenhouse gas emissions associated with management of carpet discards as well as safeguards for the use of recycled output, such as land application of calcium carbonate from post-consumer carpet (PC4).

5.10.1 Greenhouse Gas Emissions and Reductions

The U.S. Environmental Protection Agency (USEPA) has identified recycled carpet as a material with significant potential greenhouse gas (GHG) reduction potential. Establishing and supporting a robust PCC recycling industry may have significant implications for GHG reductions statewide. GHG reductions related to California Program activities in 2019 were calculated utilizing the Excel-based USEPA [Waste Reduction Model](#) (WARM).

As noted in prior Annual Reports, due to the reduction in domestic depolymerization of nylon 6 (with the shutdown of Evergreen Nylon Recycling), less energy-intensive mechanical practices are replacing the use of chemical conversion practices, resulting in a net reduction of greenhouse gas emissions for every pound of carpet recycled compared to previous years. Due to these industry changes, the GHG estimates in this report may be underestimated since it is not clear if the existing WARM model reflects this decrease in high-intensity depolymerization.

Results indicate a net reduction of 323,301 metric tons carbon dioxide equivalent (MTCO₂E) since Program inception, through diversion from landfilling, or an average annual reduction of 39,428 MTCO₂E since 2012. Total emissions reductions to date are based on the cumulative sum of reductions from July 1, 2011–December 31, 2019, using estimates generated by the Excel-based EPA WARM model (version 15) versus a baseline in which all the material was landfilled. Average annual emissions reductions are based on annual reductions from 2012–2019. Baseline year (July 1, 2011–June 30, 2012) emissions reductions were previously calculated and reported as 24,926 MTCO₂E.

In 2019, recycling and source reduction of carpet resulted in the net reduction of 70,118 metric tons of MTCO₂E, which is greater reduction of 12,089 MTCO₂E from 2018 (see Figure 5-12). Table 5-6, Table 5-7, Figure 5-12, and Figure 5-13 represent the WARM Analysis, Summary, and Equivalency Results for 2019 GHG emissions reductions.

Figure 5-12. Estimated Greenhouse Gas Emissions Reductions (Metric Tons CO₂E)

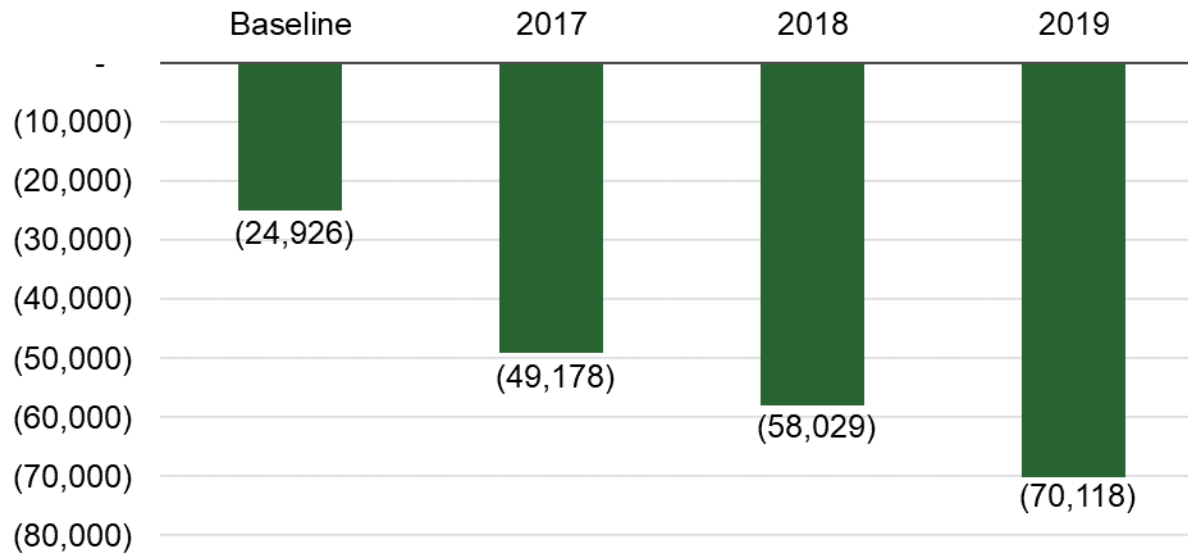


Table 5-6. WARM Analysis of Greenhouse Gas Emissions Reductions for 2019

Waste Reduction Model (WARM) – Results	Metric Tons CO ₂ E*
Total GHG Emissions from Baseline MSW Generation and Management	3,077.03
Total GHG Emissions from Alternative MSW Generation and Management	-67,040.53
Total Change in GHG Emissions (Alternative Minus Baseline)	-70,117.56

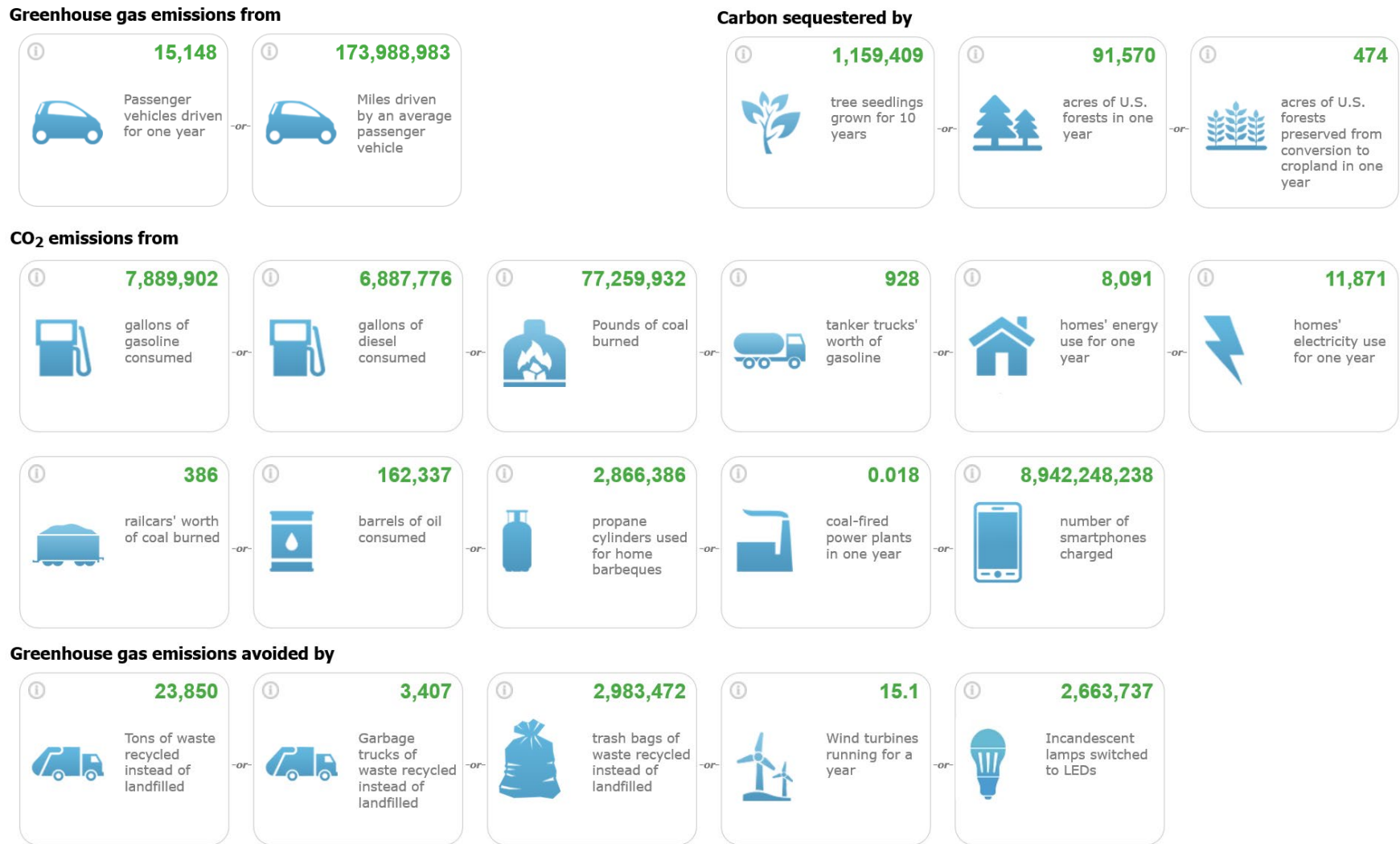
*Table Note: CO₂E = carbon dioxide equivalent. A negative value (shown in parenthesis) indicates a reduction.

Table 5-7. WARM Greenhouse Gas Emissions Analysis for Baseline and Alternative Management of Carpet, 2019

Scenario	Carpet Tons Source Reduced	Carpet Tons Recycled	Carpet Tons Landfilled	Carpet Tons Combusted	Carpet Tons Composted	Carpet Tons Anaerobically Digested	Total Metric Tons CO ₂ E
Baseline	N/A	N/A	151,918.11	N/A	N/A	N/A	3,077.03
Diversion	358.41	28,645.13	122,905.04	9.53	N/A	N/A	-67,040.53
Net Change	+358.41	+28,645.13	-29,013.07	+9.53	N/A	N/A	-70,117.56

Table Notes: For explanation of methodology, see the [EPA WARM Documentation](#). According to USEPA, emissions estimates provided by this model are intended to support voluntary GHG measurement and reporting initiatives. The GHG emissions results estimated in WARM indicate the full life-cycle benefits of waste management alternatives. Due to the timing of the GHG emissions from the waste management pathways (e.g., avoided landfilling and increased recycling), the actual GHG implications may accrue over the long-term. Therefore, one should not interpret the GHG emissions implications as occurring all in one year, but rather through time.

Figure 5-13. Greenhouse Gas Emissions Reductions for 2019: Equivalency Results for 70,117.56 MTCO₂E*



*For more information on how the equivalencies are calculated, please refer to USEPA's [Calculations and References](#) webpage.

5.10.2 Safeguards for the Use of Recycled Output

To ensure safe and legal use of recycled output, CARE has developed a number of guidelines and safeguards. This section addresses post-consumer carpet calcium carbonate (PC4). In response to a single event land application of PC4 in a landowner's almond orchard (CARE was unaware of this one time trial use) and in compost in 2017–2018, CARE initiated research with the University of California at Davis and initiated discussions with the California Department of Food and Agriculture to assess potential environmental impacts of such uses of PC4.

In response to these developments, CARE took the following actions to strengthen safeguards for the safe and legal use of recycled output including PC4:

- Invested resources in the completion of a scientific study conducted by UC Davis researchers to understand the potential impacts associated with compost or land application uses of PC4. CARE will continue to support the best available science to provide ongoing guidance.
- Strengthened internal reviews of processor reported data on recycled output to ensure that contact information is provided, and CARE staff is familiar with receiving parties and disposition use. Product producers are responsible for securing testing and clearances for land applications and ensuring compliance with all local, state, and federal regulations.
- Discontinued allowance for incomplete reporting of recycled output recipient information such as placeholder recipient names or “available upon request” inputs previously allowed due to confidentiality concerns.
- Discontinued payments of PC4 in land or compost applications as of June 2018, for applications within California; use outside of California continues to be allowed per individual state guidelines. No payments were made in 2019 for such applications.
- Recommended that any processors receiving subsidy funds for such PC4 use in compost or land applications be prioritized for AUP review.
- Developed draft guidelines for the in- and on-ground uses for PC4. The draft guidelines were presented to and reviewed by CalRecycle, and the revised guidelines were published in September 2019.

5.11 Increasing Market Growth of Secondary Products

CCR Section 18944(a)(5)(A)10. *Describe efforts to increase the market growth of secondary products made from post-consumer carpet.*

In 2019, the Program continued to focus on eight primary areas previously designated, as well as those subsequently defined through AB 1158, to promote the use of recycled output in new carpets or secondary products useful to the marketplace. These market-related strategies and incentives are discussed in greater detail in Chapter 6, *Market Development*.

The year was highlighted by Program efforts that focused on stimulating the secondary market, including the PC4 subsidy for Tier 1 processors, further development of the Double Green™ label, and implementation of the grant program. The year saw an increase in Tier 2 manufacturer pounds shipped and sold, to 26.1 million pounds in 2019, up from 24.8 million pounds in 2018, a 5% increase (see Figure 5-14). Tier 2 manufacturer pounds have increased steadily since the subsidy was launched in 2013. Pounds in 2019 included a growing contribution from the nylon 6 subsidy that started in October 2017. Nylon 6 reached nearly 7 million pounds in 2019, more than double the 3.2 million manufacturer pounds shipped and sold in 2018, the first full year of the new subsidy. In 2019, nylon 6 represented 27% of total manufacturer pounds. Tier 2 non-nylon, primarily comprised of PET and PP, remained strong in PET markets yet realized a sizeable drop in PP markets. Late Q4 saw for the first time the introduction of PET pellets. During 2019, 25 companies used PCC materials in 77 products.

Figure 5-14. Tier 2 Manufacturer Pounds Shipped and Sold Over Time

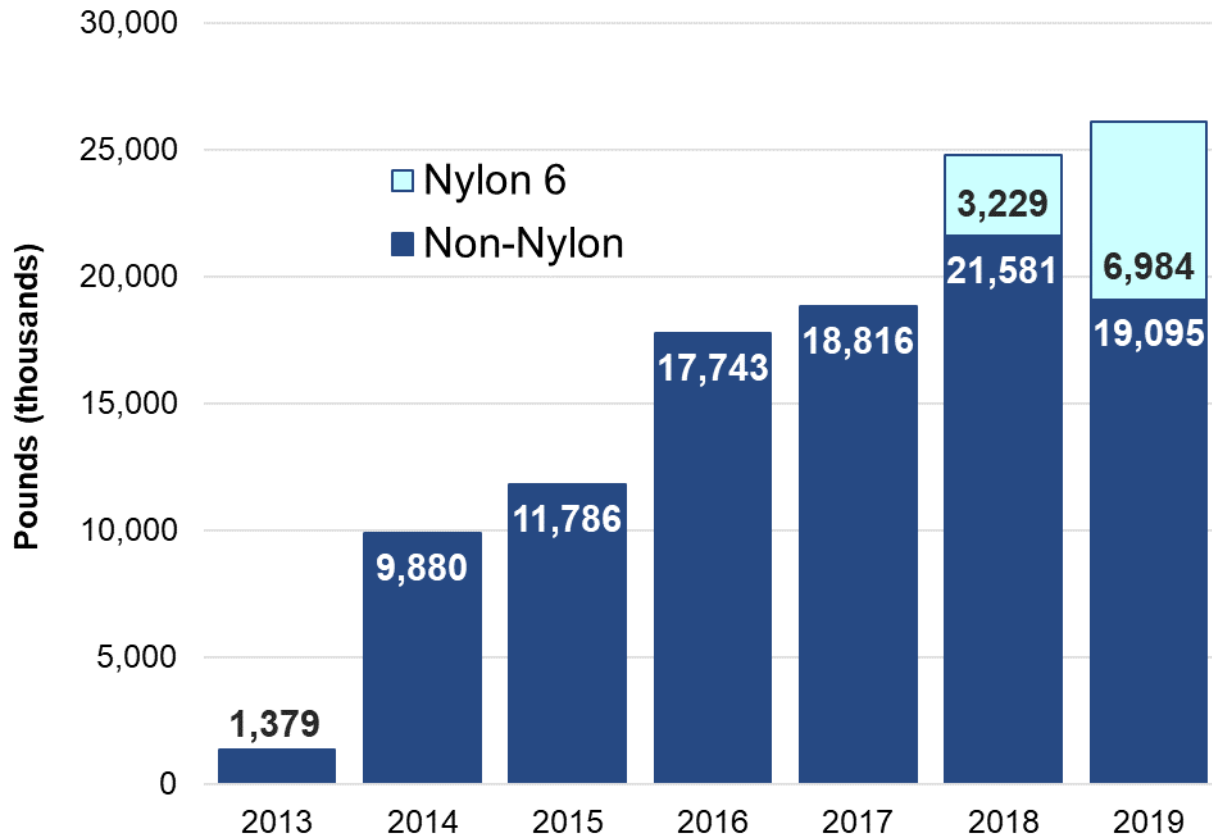


Figure Note: Beginning in Q4 2017, Tier 2 manufacturer pounds also include recycled products made with nylon 6.

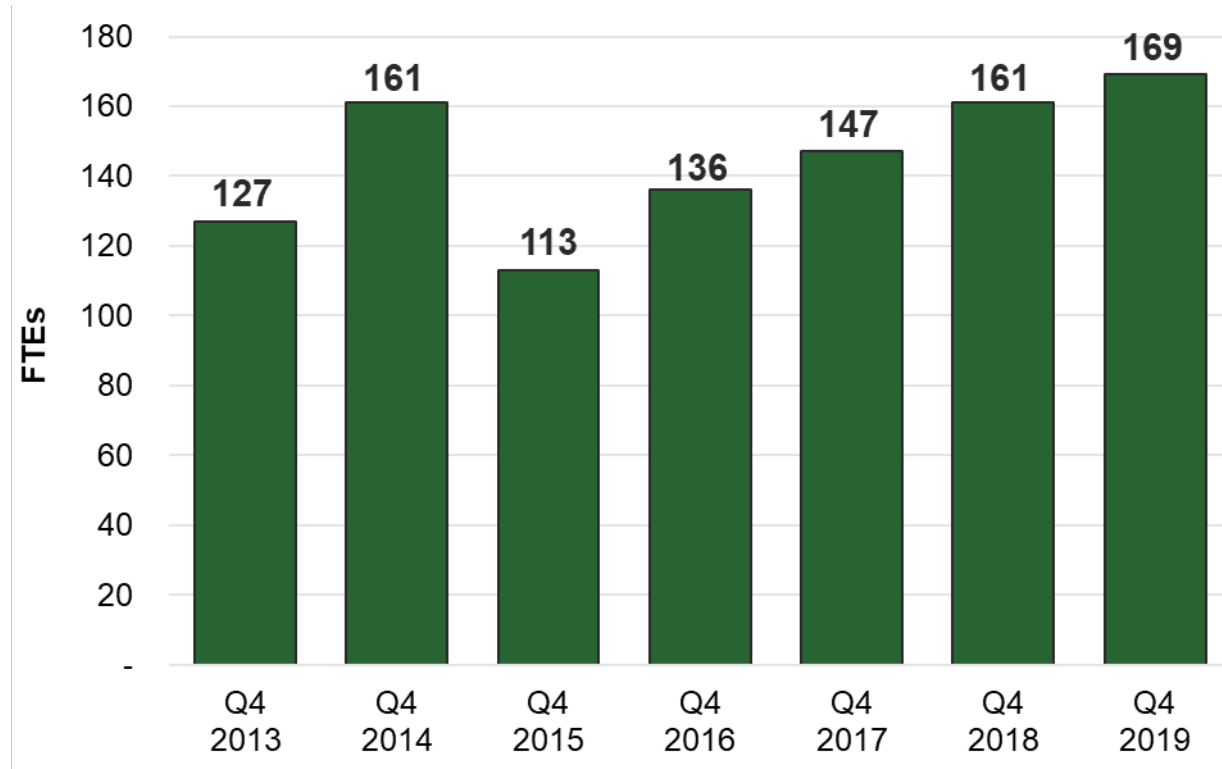
5.12 Creating Green Jobs

CCR Section 18944(a)(5)(A)11. Describe number of jobs attributable to the carpet stewardship program as data are available.

At the close of 2019, a total of 169 full-time equivalent (FTE) jobs were attributed to collector/sorter, Tier 1 processor, and Tier 2 manufacturer employers (see Figure 5-15), including 14 CARE staff and contractors. This is a 5% increase from 161 total FTEs reported in 2018. An estimated 17 new FTE jobs were added in 2018 as a result of Cycle 1A and Cycle 1M grant investments made in 2016–2018. Job growth owed to investments made in Q4 2018 and in 2019 through Cycles 2A, 2B, 2M, and 3A projected 52 new jobs starting in 2019; however, by year end only six new FTEs materialized. It should be noted that processor power delivery, CSE and Processor permit expansion delays, and Manufacturer technical challenges with new equipment have pushed many of those FTE starts out into 2020. It should also be noted that only

those FTEs related to Tier 2 manufacturers receiving subsidy funds from CARE are represented in the figure. FTEs related to grants awarded to non-subsidy receiving manufacturers (e.g., PC4 users) would account for any difference.

Figure 5-15. Total FTEs Reported (at year end)



Job numbers (reported as FTEs) are only for direct jobs within California and are submitted for quarters or months when a company submits a subsidy request. The figure does not include jobs at facilities located outside California, such as Tier 1 processors and Tier 2 manufacturers located in other states, and CARE FTEs were included beginning in 2016. The Program also estimates that three to five indirect jobs are created for every one job resulting from the PCC recycling industry in California. Under this assumption, the industry has created more than 500 direct and indirect jobs in California. This number will increase as recycled output demand increases, and new Tier 1 processors and Tier 2 manufacturers open new facilities within California.

5.13 Measurement Methodology, Assumptions, Factors, and Data Sources

CCR Section 18944(a)(5)(B)1. Report describes the measurement methodology, assumptions, conversion factors, and data sources.

Measurement methodology is described in the California Carpet Stewardship Plan. The Program recycling rate, which was 19% in 2019, is calculated as a function of total estimated discards. The formula used for calculating carpet available for diversion is summarized below.

The values used in the formula are generally updated annually in April based on market data gathered by Market Insights, LLC, an independent market research firm.⁵ Table 5-8 below shows the updated values used for 2019. The Program is currently conducting a study regarding the Discards formula and potential modifications.

5.13.1 Formula for Calculating Carpet Discards

Table 5-8 presents the variables for estimating carpet discards and their 2019 values.

Table 5-8. Discards Methodology Variables, 2019

Variable	Variable Description	Updated Value	Source
S	Sales (square yards)	80,583,382	Accounting firm (Aprio, LLP)
R	Replacement rate (%)	0.83	Market Insights, LLC
P	Average weight of carpet per square yard (pounds)	4.48	CARE and corroborated by Cascadia Consulting
D	Pounds of carpet from demolition projects not replaced (%)	0.006	Market Insights, LLC
DS	Pounds of carpet removed but not replaced by carpet (%) – Deselection	0.008	Market Insights, LLC

⁵ Market Insights, LLC, *U.S. Carpet Market Size for Recycling Program Tracking with California, Illinois, and Minnesota Markets Detailed* (February 17, 2020).

Table 5-9 shows the formula and calculations used to estimate discards in 2018, with descriptions of each variable below.

Table 5-9. Discards Formula Calculations for 2019

2019 Total
= S * R * P * (1 + D + DS)
= 80,583,382 * 0.83 * 4.48 * (1 + 0.0060 + 0.008)
= 303,836,224 pounds
= 303.8 million pounds

S = Sales: Carpet sales (square yards) in California for the reporting period. Sales data comes from the independent accounting firm Aprio, which collects the confidential sales data from the carpet manufacturers registered with CARE.

R = Replacement: Percentage of carpet that is replacement—that is, carpet replacing existing carpet. This rate is derived as the weighted average from the residential and commercial sectors and is reported by Market Insights, LLC.

P = Density: Average weight of carpet per square yard. CARE gathers and analyzes raw industry data (via a confidential mill survey) to calculate the weighted averages of carpet weights of broadloom and tile used in the commercial and residential sectors.

D = Demolition: Pounds of carpet from demolition projects that were not replaced. This includes the weighted demolition rate (75% residential broadloom, 15% commercial broadloom, and 10% commercial carpet tile). *D* is converted to pounds by multiplying the percentage by the product of *S * R * P*—that is, applying the demolition percentage to the replacement quantity by weight. The demolition data is gathered by Market Insights, LLC. Note that demolition represents the teardown of a building. The actual volume of carpet resulting from this process is estimated.

DS = Deselection: Pounds of carpet removed but not replaced by carpet—that is, the removal of carpet for the replacement by another flooring material. Deselection (*DS* = Replacement in pounds * Deselection rate) is estimated to be approximately 0.8%, based on review of historical trend data. (Note: recent work suggests this source of PCC may be more significant than previously assumed. Further refinement is underway in 2020.)

The current formulas also take into account the following:

- Trimmings discarded during the installation process are accounted for within total carpet sales figures, as reported quarterly by participating carpet mills.

- Imported carpet discards are excluded from data in this report, as Tier 1 processors report only California carpet materials collected, recycled, and disposed. [Imports represent a small percentage of carpet sales in California. Reported California carpet shipments by carpet mills are verified through regular Agreed Upon Procedures (AUP) reviews by Aprio.

During review of the draft 2017–2021 Plan, CalRecycle raised concerns regarding the Discards formula calculations. CARE acknowledged that this formula and approach to discards, which has been in use since the Program’s early days, results in a very different figure than is estimated in CalRecycle’s statewide waste characterization study. In response, CARE initiated a study and discussions with CalRecycle, CARE, and Cascadia Consulting Group (including statisticians) to review relevant information regarding the estimation of carpet discards.

Preliminary data from this Discards study has validated certain components of the established formula while raising questions on others. CARE has recognized that the deselection parameter is likely off significantly driven by the rapid rise of LVT in the marketplace. CARE will review the findings with CalRecycle in 2020 and work with the agency to make modifications if/as needed

5.14 Performance Trends Over Time

CCR Section 18944(a)(5)(B)2. Report demonstrates that over time source reduction, reuse, and recycling increased, while environmentally safe transformation and land disposal decreased.

Figure 5-16 summarizes performance trends over time with regard to four key indicators:

- Gross collections.
- All material sent back to landfill by CSEs and Tier 1 processors (includes both sort and processing waste).
- Recycled output (portion of gross collections that qualifies as Reuse, Recycled Output Type 1, Recycled Output Type 2, PC4, or Carcass).
- Net diversion (balance of gross collections minus materials sent to landfill).

Figure 5-16. Collection, Recycled Output, Net Diversion, and Process Waste to Landfill Performance Trends

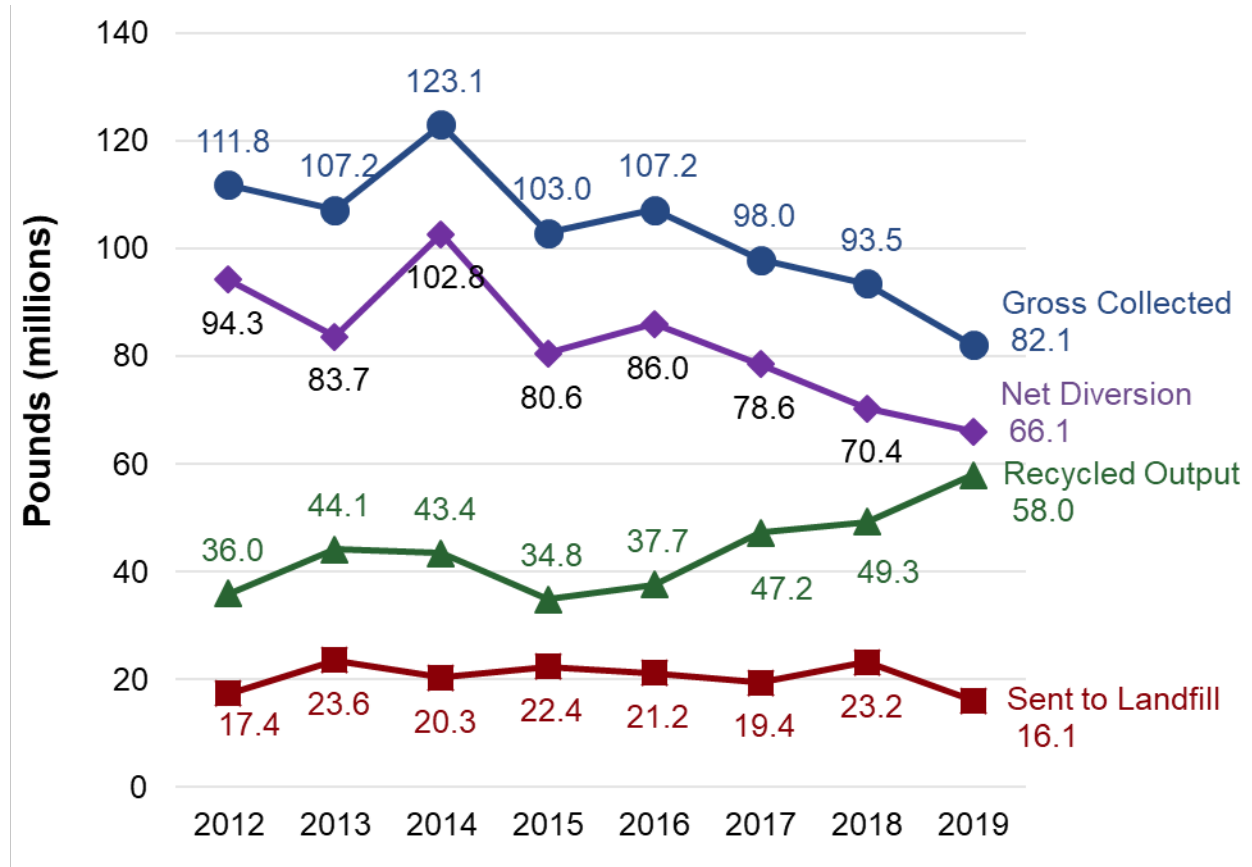


Figure 5-16 illustrates the history of the Program since 2012. External macroeconomic and industry factors triggered a sharp decline in gross collections, diversion, and recycling output during 2015. Since a program low in Q3 2015, recycled output and the corresponding recycling rate has recovered and continued to grow each year.

Since the collection of discards is generally tied to the sale of new carpet, as sales continue to decline, gross collection also declines. The recycled output increased due to increasing yields as uses for PC4 were brought online.

In 2019, the Program reached a 19% recycling rate, up from 15% in 2018. In Q2 2019, the Program reached its highest quarterly recycling levels to date, exceeding the previous quarterly high of 16.3% (Q2 2018). In 2019, the quarterly recycling rate reached 18.4% in Q2, 19.9% in Q3, and a new high of 22.5% in Q4—a 44% increase over Q4 2018. Typically, these figures fluctuate seasonally, with lower levels of materials usually generated during winter (Q1 and Q4) compared to summer (Q2 and Q3), which also tracks with new carpet sales. In light of this pattern, the 22.5% peak in Q4—in what is usually a lower period—bodes well for future recycling growth. This

forecast, of course, is dependent upon the unknown duration and spread related to Covid-19.

Program changes over time compared to the baseline year (July 2011–June 2012) include the following:

- 635% increase in **reuse** from 98,000 pounds in the baseline year to 717,000 pounds in 2019.
- 110% increase in **recycled output** from 28 million pounds baseline to 58 million pounds in 2019.
- Increased **recycling rate** from 8% in the baseline year to 19% in 2019 and a quarterly high of 22.5% in Q4 2019.
- **Net diversion** ranging from 78 million pounds (22% of discards) baseline to a high of 103 million pounds in 2014, declining to 66 million pounds (22% of discards) in 2019.
- A 28% decrease in **process waste to landfill** from the baseline of 22.2 million pounds to 16.1 million pounds in 2019.
- Major reduction in **energy recovery** as diversion, with 19,000 pounds in 2019, a drastic decrease from the baseline of 15.7 million pounds.
- A 15% **reduction in disposal** (PCC waste disposal to landfill) from baseline of 279 million pounds to 238 million pounds in 2019.
- Fluctuating **gross collections** from 28% of discards in the baseline year to a high of 34% in 2014 and dropping to 27% in 2019.
- **Jobs** have fluctuated substantially over time as new players come into and out of the carpet recycling marketplace (and as the Program has improved its job data collection), gaining 8 FTE jobs in 2019 over 2018 and 56 jobs over the low in 2015. The baseline year recorded jobs as high as 724 in Q2 2012. This data point is now considered suspect as we believe it likely included reporting of recyclers from outside California. In recent times CARE makes sure these are California only jobs that are reported. In addition, the metric is FTE's (fulltime equivalents) and not employees.
- **Recycled carpet content products** totaled 77 products from 25 manufacturers in 2019, up 88% from 41 products in 2018. It should be noted, manufacturers are tallied from both those receiving subsidies and those who do not receive subsidies yet as listed in the CARE Recycled Products Catalog. Additionally, products included also include pellets and polyols.
- New **public carpet recycling drop-off sites** were added over time, expanding convenient collection opportunities throughout the state. The Program had 73 public drop-off sites in 2019, compared to zero sites at the start (baseline) and 6 sites in 2012. See Section 4.2 for more details.

- Implemented **numerous new education and outreach efforts** since 2011, including contacting retailers on compliance and carpet recycling opportunities; surveying installers on barriers to carpet recycling; providing widely-viewed installer carpet recycling videos; outreach to local government and installers on drop-off site opportunities; raising awareness on carpet recycling; promoting “buy recycled” products; providing information on grants and subsidies and conducting consumer/contractor outreach through booths at regional home improvement shows. See Chapter 8, *Outreach/Education*, for more details.

5.15 Progress Toward Achievement of Goals

CCR Section 18944(a)(5)(B)3. Report covers progress toward achievement of all goals in the approved stewardship plan.

The Program has remained consistent in showing steady continuous meaningful improvement throughout 2019. However, real-world external market conditions including but not limited to the price of oil (the primary driver of virgin material pricing for carpet fiber) and a constrained export market—particularly due to China’s National Sword policies directly impacting postconsumer markets for plastics—have posed ongoing challenges. These factors have made use of virgin (oil-based) materials more cost-effective, pushed more postconsumer plastics into the domestic market, as well as created commodity competition for PCC recovered polymers. As in seen in other recycling market slumps, the climb back up takes far longer than the decline. Figure 5-17 shows generally a dramatic drop in oil prices about September 2018. The carpet recycling community believes oil prices must be in the \$60–80 per barrel range to support carpet recycling.

Figure 5-17. Price of Crude Oil in Dollars per Barrel Over Time

Source: U.S. Energy Information Administration, Cushing, [OK WTI Spot Price FOB](#) (dollars per barrel).

California’s overall recycling rate and mature recycling infrastructure—initially spurred through the passage of AB 939 in 1989—have also been adversely affected by China’s policies, the price of oil, and other macroeconomic challenges affecting global recycling commodities markets. As previously noted in CalRecycle’s 2017 State of Disposal and Recycling report:

“Recycling does not happen in a vacuum. Recycled materials need to compete with virgin materials in the manufacturing sector. According to the Center for International Environmental Law, the energy sector is investing \$164 billion for 264 new/expanded plastic production facilities in the United States. By 2025, production of virgin ethylene and propylene may increase by about a third. Plentiful, cheap virgin material could undermine source reduction efforts, undercut prices for recovered plastics....”

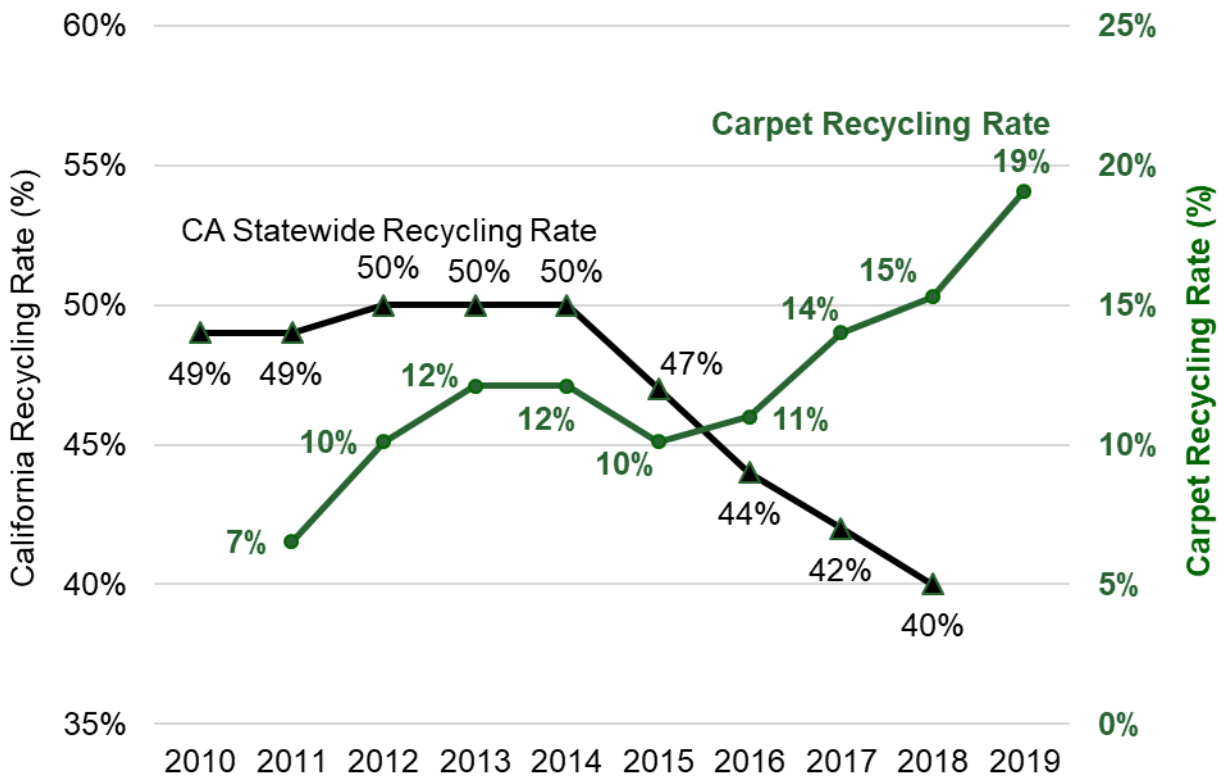
Thus, it should seem reasonable that a carpet stewardship recycling program would also be negatively impacted by these forces. However, despite significant macroeconomic and capacity throughput challenges, CARE’s Program continues to

steadily trend upward, with 2019 showing all time program high strong gains in the carpet recycling rate.

To provide perspective, CARE plotted the recycling rate over the life of the Program in Figure 5-18 and showed California’s overall statewide recycling rate for comparison. While CARE recognizes that additional work remains to be done, the Program’s annual recycling rate has increased to 19% in 2019, with Q4 hitting 22.5%, from its dip to 10% in 2015, despite ongoing challenges in the broader national and international recycling community. Conversely, during that same period, and for many of the same reasons, California has experienced a significant ten-point decline over the last four years of reporting.

While the plastics market impact from China’s National Sword, along with similar efforts from other Southeast Asian countries, may likely continue for some time, the CARE program has continued to show an increasing recycling rate since 2015. In comparing the CARE program to the overall diversion rate in California, as shown below, CARE believes that the Program has continued to show conservative, yet steady and reliable, progress regardless of market setbacks.

Figure 5-18. Comparison of California Recycling Rates for Materials Statewide and for Post-Consumer Carpet (PCC)



Changes made in 2015–2016 to improve the Program’s responsiveness to fluctuating marketing conditions laid the foundation for capacity expansion and the growth in recent years. In 2019, the Program continued to benefit as these changes took hold in the market, including the following:

- New capacity and recycled carpet content products supported by grant funds.
- Increased recycled output.
- Increased yield particularly with growing product demand for PC4.
- Increased convenient collection public drop-off sites.
- Expanded private collection sites for flooring professionals.
- Expanded education and outreach, particularly installer education and Buy Recycled product promotion.
- Stakeholder collaboration through AB 1158’s legislated creation, appointment, and formalization of the California Carpet Advisory Committee.

In October 2017, the passage of AB 1158 adjusted the 2020 goal timeline from December 31, 2020, to January 1, 2020, effectively reducing the timeframe for achieving this goal by nearly one year. The Program reached its highest quarterly recycling rate to date in Q4 2019 at 22.5%, despite challenging macroeconomic conditions affecting recycling markets in California and elsewhere. The Program continues to work diligently to achieve the 26% recycling rate goal, which it is on target to reach in 2021. It should be noted that example Table A9-1 shown in the approved 2018–2022 Plan (page 328) reflects that the recycling rate for full year 2019 was projected at 21%. As described earlier in this report a number of operations failed to meet their targeted start dates due to factors beyond anyone’s control. Any one of those entities would have propelled results to meet the 24% recycling rate for Q4.

The Program adopted both annual and 5-year goals in the 2018–2022 Plan, which was formally approved in February 2019. The delay in approval of grant Cycles 2 and 3 until late 2018 and the shortened timeline have hindered progress toward the 24% goal, though the Program reached its highest recycling level of 22.5% in Q4 2019, even though Q4 is typically a time with lower sales and collections. CARE firmly believes the 24% Q4 goal would have easily been achieved if not for five major setbacks, noted in Executive Summary, in capacity expansion. The Plan set a goal of 26% recycling in 2021 and 27% by the end of 2022, the Program is working to achieve these goals.

5.16 Program Goals Added in AB 1158

AB 1158 added new goals in three areas, which are addressed in the following sections:

- Highest Recyclability
- Ineligible Program Expenditures
- Carpet Advisory Committee and State Agency Procurement

5.16.1 Highest Recyclability, Union Trainings, Advisory Committee

PRC Section 42972(a)(4). Include a funding mechanism... that provides sufficient funding to carry out the plan... including incentives or grants to state-approved apprenticeship programs for training apprentice and journey-level carpet installers in proper carpet recycling practices. Any grants or subsidies provided for the recycling of postconsumer carpet shall be structured to incentivize the recycling of carpet materials that have the highest recyclability.

The CARE 2018–2022 Plan includes significant commitments to increasing carpet recycling by way of installer education and training. Opportunities emerged based upon conversations with representatives from District Councils 16 and 36, representing the floor covering locals in Northern and Southern California. In 2019, CARE staff worked with IUPAT DC16 representatives to refine training materials for union installers. One-hour interactive trainings were given by CARE staff to four classes of apprentice installers in the fall 2019, reaching a total of 64 early-career installers. This training will be refined and expanded in 2020 to include multiple trainings and a specialized collection service, whereby installers will “learn by doing.” Installer apprentices will prepare carpet for recycling by using a container on site at the union headquarters, that will also be open for use by other area installers. By working with early career installers, CARE hopes to encourage best practices for recycling for many years to come.

CARE budgeted for, initiated contact, developed and delivered carpet recycling trainings for apprentice and journey-level carpet installers with the California statewide soft-flooring Union representatives. CARE conducted installer tabling events and training in 2018 and 2019 and is planning for a statewide expansion of its training program. See Section 8, *Outreach/Education*, for specific details.

As noted in the 2018 Annual Report, the Carpet Stewardship Law requires grants or subsidies provided for the recycling of PCC to be structured to incentivize the recycling of carpet materials that have the “highest recyclability.” In response, the Program—with input from the Advisory Committee, industry, and CalRecycle—developed a list of

recyclability criteria based on carpet market expertise and recycling technology experience. Table 5-10 on the following page (which appears as Table 6 on page 116 of the 2018–2022 Plan) summarizes criteria and weightings for different carpet types. Decisions related to grants and subsidies are designed to incentivize Highest Recyclability. Further detail on Highest Recyclability can be found in the Market Development Section of the Plan.

Based upon the initial scoring for Highest Recyclability, Commercial Carpet Tile (nylon 6 and nylon 6,6) and Residential Broadloom (nylon 6 and nylon 6,6) were the highest scoring. However, it should be noted that prior to the Highest Recyclability requirement, nylon 6 and nylon 6,6 had strong market pricing on their own; thus, this ranking effectively mandated that CARE pay higher subsidies on a material with already strong market pricing. Chapter 6 of this report provides more information on how grant scoring and preferences were modified to meet the Highest Recyclability requirement.

Now that chemical recycling is expanding into other mainstream polymers, CARE plans to work to refine and evolve the definition of HR.

Table 5-10. Highest Recyclability Criteria: CARE Composite Results with Weighting (Wt.)

Highest Recyclability	Wt.	N6	N6,6	PET	PTT	PP	Wool	PC4	Tile N6	Tile N6,6	B'loom N6	B'loom N6,6	B'loom Wool
Criteria	#	Res	Res	Res	Res	Res	Res	Other	Com	Com	Com	Com	Com
Ease of deconstruction*	15	105	105	105	105	105	105	75	150	150	30	30	105
Safely recycle all layer similar or higher material performance*	15	60	150	150	60	105	60	75	150	150	75	75	60
Cost-effectiveness*	10	50	100	20	10	10	40	20	80	80	10	10	40
Energy-saving*	5	20	25	45	45	45	45	10	45	45	20	20	45
Identification of resin type*	5	50	50	50	50	50	45	50	45	45	45	45	45
Extent of subsidy required	10	40	100	20	20	40	0	20	100	100	30	30	0
Reusability	5	10	10	0	0	0	15	5	50	50	15	15	15
Markets available for products													
a. Closed-loop recycle back into carpet	10	100	0	0	30	0	0	0	100	100	0	0	0
b. Non-carpet closed-loop (recycled multiple times)	10	30	60	60	60	60	0	30	100	100	0	0	0
c. Downcycled (one-time)	10	50	40	40	50	40	0	90	0	0	0	0	0
Volume available	5	30	15	15	5	15	0	45	35	20	20	20	0
TOTAL	100	545	655	505	435	470	310	420	855	840	245	245	310

Table Notes: Highest Recyclability v12 7-07-18 (also appears as Table 6 on page 116 of the 2018–2022 Plan).

*Items referenced by AB 1158. **Wt.** = Weighting. **Res** = Residential. **Com** = Commercial. **Mat'l perf.** = Material performance. **B'loom** = Broadloom.

5.16.2 Ineligible Program Expenditures

PRC Section 42972(c)(6). *A carpet stewardship organization shall not expend funds from the assessment for any of the following purposes:*

- (a) Penalties imposed pursuant to Section 42978.*
- (b) Costs associated with litigation against the state.*
- (c) Engineered municipal solid waste conversion, as defined in Section 40131.2, the use of cement kilns to burn carpet, or transformation, as defined in Section 40201.*

CARE has committed and affirms that no assessment fee funds shall be expended on penalties or litigation against the State of California. This has been validated by third-party financial and performance audits, as well as CalRecycle Program audits to specifically evaluate Program spending.

Subsidies for both Carpet As Alternative Fuel (CAAF) and Kiln were discontinued as of December 31, 2017.

5.16.3 Carpet Advisory Committee and State Agency Procurement

PRC Section 42972.1(a). *Appointment of an Advisory Committee which shall make recommendations of carpet stewardship plans submitted to CalRecycle. [summary]*

PRC Section 42972.1(b) *Stewardship plans, plan amendments and annual reports shall be reviewed prior to submittal to CalRecycle. CARE is required to provide written explanation if they are unable to incorporate, or when they will be able to incorporate, Advisory Committee recommendations into a plan, plan amendment or annual report. [summary]*

PRC Section 42982. *The Department of General Services shall, to the extent feasible and within existing resources, take appropriate steps, including, but not limited to, revising relevant procurement rules, to ensure both of the following requirements are satisfied:*

- (a) Postconsumer carpet that is removed from state buildings is managed in a manner consistent with the purpose of this chapter.*
- (b) Carpet purchased by a state agency contains a minimum amount of postconsumer content that shall be determined by the Department of General Services and published in the State Contracting Manual by July 1, 2018.*

Section 3.4.2 addresses the formation and work of the Carpet Advisory Committee. In accordance with PRC Section 42972.1, CARE submits draft stewardship Plans, Plan Amendments, and Annual Report drafts to the Advisory Committee for review no less than 30 days before submitting materials to CalRecycle. CARE seeks to incorporate Advisory Committee comments where appropriate and responds in writing to Advisory Committee recommendations that are not incorporated into plan or annual report materials.

The Program acknowledges the state's desire and ongoing efforts to ensure carpet recycling from its own facilities and to support carpet recycling through procurement policies – despite not having adequate regulatory enforcement needed to ensure recycling and procurement.

6 Market Development

CCR Section 18944(a)(6). The annual report shall include a description of possible market development activities to incentivize the market growth of secondary products made from post-consumer carpet.

6.1 Introduction

CARE continued with their long-standing commitment in providing market and product development assistance, as well as in affording substantial support, both through technical assistance and grants, for California-based capacity expansion. Key to CARE's market development and product expansion efforts have been the consistent and reliable expertise in the following areas: Technical Assistance via Assets Unlimited (Frank Endrenyi), Grants Management and Coordination via Abbie Beane, engagement of a California-based experienced carpet recycler contractor (Rob Thiess), and Marketing and Communications Strategies via Gigantic Ideas Studio. Further, in 2019 the Program moved to expand upon their past market development successes in bringing on a now full-time CARE staffed position with Rob Thiess as Product and Market Development Manager. After CalRecycle approval of the 2018–2022 5-year Plan, CARE proceeded with a strategically targeted approach, which included immediate issuance of CARE grants that were previously reviewed for originally anticipated awards in 2018. This additional collection and capacity expansion funding, along with the development of the CARE Ecomedes sustainable products website, was designed to build upon the success of CARE's 2018 Program.

In general, CARE's product/market development strategies include:

- Development of new recycled carpet products produced in California
- Exploration of alternative uses for existing carpet products
- Increasing the number of manufacturers producing recycled carpet products in California
- Increasing the volume of used PCC materials that Tier 2 manufacturers utilize in their recycled carpet products in California
- Engaging with public entities and groups that are required to purchase "Green Products" to increase interest and build market demand in purchasing recycled carpet products through the creation of a sustainable products website (Ecomedes)

- Finalizing the Double GreenSM brand registration to call attention to products containing both California-derived PCC and a second post-consumer recycled materials such as rubber, textiles, etc.)
- Building market demand with companies outside of California to utilize and incorporate PCC materials into their current or additional product lines when additional volume is available
- Participation in multiple tradeshow events via presentations, and/or displays, often with recyclers present to promote their products.
- Extensive confidential consulting with Eastman Chemical Company on their Carbon Renewal project and future Methanolysis PET Depolymerization plans.
- Consultation with Loop Industries and Indorama on their plans for PET depolymerization.
- Dialog with Rise Composite Technologies on their plant reconfiguration for use of PET fiber in engineered lumber.
- Support for Verdex in their development of novel technology for the use of PET in non-woven applications.
- Extensive and on-going dialog and support for recyclers in general on feedstocks, processing technology and market opportunities.

CARE continues to provide technical and business development assistance to processors, manufacturers and their potential customers on a confidential basis. Current product and market development work is being driven by two operational California processors looking to open additional markets. In late 2019, and only after consultation with CalRecycle, significant effort was expended to assist one of those processors to bring online a major chemical company (Eastman Chemical Company) for the use of PET pellets and located outside California. This was phase 1 activity to aid development of new technology that will consume significant amounts of PET PCC pellets for upcycling into a wider array of consumer products. Please see the following Eastman Chemical links and process image (Figure 6-1) for more information on consumer products to be manufactured from various plastic material sources including PCC.

- March 2019 – [Eastman offers innovative recycling technology for polyesters](#)
- October 2019 – [Eastman begins commercial operation of innovation chemical recycling technology](#)

Figure 6-1. Manufacturing Lifecycle for Eastman Chemical PET Pellet Use

Creating value from waste: new life for reclaimed plastic

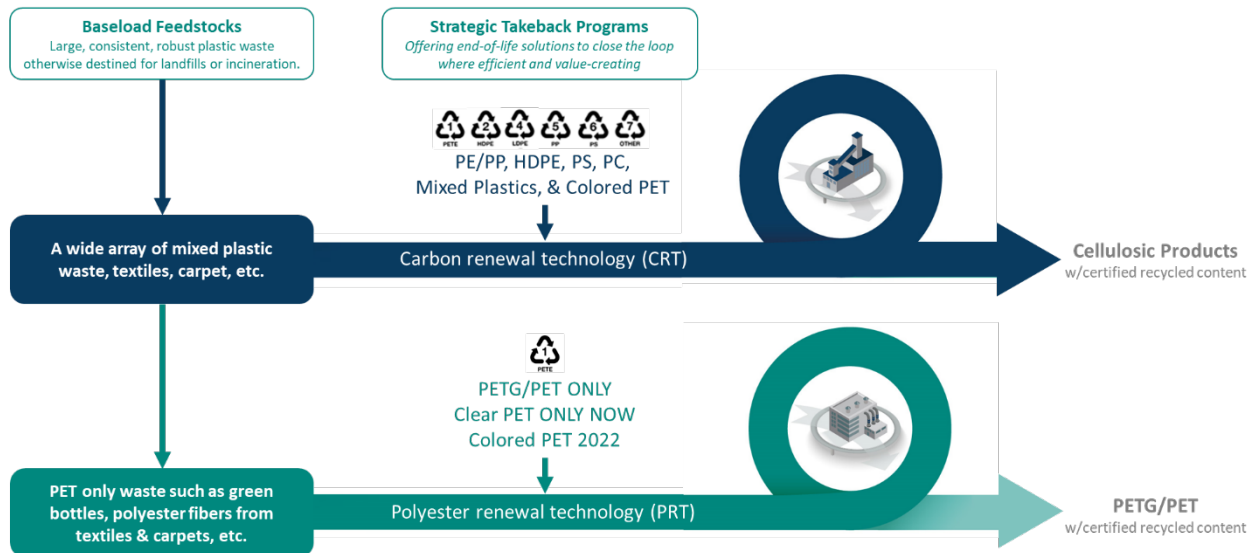


Figure Note: Graphic provided by Eastman Chemical Company; used with permission.

2019 activities also continued to center on maintaining and building upon the successful product and market efforts CARE has established for California post-consumer carpet (PCC) material in the following ways:

- A multi-phase outreach effort to contact all the California companies currently manufacturing products containing post-consumer recycled material, in an effort to expand PCC market outlets for California processors.
- Outreach to California-based recycled products manufacturers (Tier 2) to look at additional ways to support expansion efforts to incorporate more volumes of PCC in their current product lines.
- Additional support given to each 2019 grant recipient, in the form of product development, market development, product placement and marketing/promotion consulting.
- Introduction of the CARE.Ecomedes.com sustainable products website to support California's SABRC program and to reach the Department of General Services along with the additional Procurement Professionals operating in the State of California and beyond. This will also be targeted toward General Contractors that bid on the various Procurement Professional's RFP/RFQs.
- Green Hive Group, SaN Pallets, Verdex, Swisstrax, 3B Protection and Visions, all CARE grant recipients, launched new product categories to expand their

offerings using substantial PET and Post-Consumer Carpet Calcium Carbonate (PC4) volumes.

- New material uses have enabled processors to expand their products into additional new markets and broadened their products sales reach.
- UC Davis is conducting additional studies on the use of PC4 as the supplement or replacement of raw material in concrete sand and Portland Cement. Final reports are expected Q3 of 2020 but may be delayed further due to the Covid-19 pandemic.

Based on the progress above, future opportunities include:

- Marketing outreach for environmental sustainability and State procurement professionals via education of the SABRC program procurement professionals.
- Securing an additional category to include: “carpet derived products” listed on the SABRC website. CARE continues to stand in support of legislation that will establish “carpet derived products” as the twelfth SABRC category. Such legislation would also look for an enforcement mechanism to provide consequences for agencies failing to reach their SABRC mandated goals. An ongoing challenge for CalRecycle.
- A Carpet-Derived Products category would include, but not be limited to: acoustical materials, architectural elements, carpet, carpet cushion, insulation for buildings, insulation for product shipment, flooring systems, flooring underlayment, mats, manufactured lumber, pallets, parking stops, spill absorbency, and wheelchair ramps.
- CARE expects to increase product manufacturing in 2020, as a result of the grant cycles funded in 2019 and in future testing grants for 2020. Product expansion areas include pallets, interlocking flooring systems, blast and ballistic proof protection barriers, construction mixes, non-woven filtration and sound deadening media, absorbents, fiber carpet underlayment and the molecular break-down of PET fibers to create new building blocks for additional industries. CARE also expects to increase processing significantly in 2020 based on capital investments made in new and existing processing facilities and collections operations in 2019.

6.2 Stimulating the Market

In 2019, historical successes in product development work based on the concept of feedstock conversion continued. This involves adding PCC material into the recipes of existing secondary products, displacing rubber or plastic in various percentages to reduce product cost, improve the scent, or increase performance. Because carpet backing material accounts for about 40% of carpet weight, ongoing efforts have focused on finding uses for the backing components mixture (polypropylene, latex, calcium carbonate) collectively rereferred to as Post-Consumer Carpet Calcium Carbonate (PC4) in a variety of other products. California Program initiatives continued to validate the use of PCC materials in 2020, including:

- Subsidy of \$0.17 per pound for Tier 1 processors producing PC4 non-fiber recycled output continued. Use of PC4 in a variety of products prevented nearly 14.1 million pounds from landfill disposal.
- Engaging a consultant to expand the Double Green™ designation into a defined certification process which designates products that contain California PCC plus at least one other post-consumer recycled material. Certification roll-out was executed in 2019.
- Cycle 1A and 1B grants (2016–2017) that funded processing equipment and product testing (see Section 6.2.1) have continued to produce results into 2019. Included in this are American Fiber Cushion, CLEAR/Circular Polymers, SafePath and Sierra Rubber Products. These projects produced more than 13 million pounds in recycled or manufactured output in 2019.
- Cycle 2A and 2B grants (2018–2019), reviewed and scored for approval in February 2018 were finally allowed to be released in October 2018 once the Plan was approved and made, as predicted, large gains in 2019. Product and Processing awardees included: Aquafil, Arropol, Circular Polymers, Green Hive Group, Interface (subsequently returned), Los Angeles Fiber Company, SaN Pallets and Visions Environmental. Testing awardees include: 3B Protection, CMJ Systems, ReFiber, Swisstrax, Verdex and Visions Environmental. More than 20 million pounds of recycled output and another 2.5 million pounds of manufactured output was added through these projects in 2019. Upwards of \$2 million was released to Cycle 2A and 2B projects in 2019.
- In 2019, Cycle 3A of capital grants was also introduced and funded six projects for a total of over \$1.5 million. All six projects will establish or expand operations between Q4 2019 and Q3 of 2020.
- Ongoing outreach to California companies currently using recycled-content material, to incorporate PCC and become Double Green™.

- Collaborative product presentations continued with CalRecycle Tire-Derived Products staff, featuring products containing both recycled PCC and recycled tire material.
- Marketing and promotion business assistance efforts were coordinated with GIS, where appropriate, in an effort to further facilitate materials collection, product expansion and sales.

The PC4 subsidy program rebounded from 2018 end-market losses and continued to make modest growth in 2019 as the two California Tier 1 processors were able to consistently produce virtually fiber-free material to meet increasing market demands. Based on early 2019 projections, PC4 uses have increased substantially with Green Hive Group's AbsorbsWell spill kit absorbent product as well as Vision Quality Coatings' light weight aggregate materials.

The Double Green™ label, rolled out in 2016, and Trademarked in Q4 of 2019 has helped to support PC4 consumption in California totaling 39.7 million pounds to date, as previously illustrated in Figure 5-7 on page 107.

All things considered, Double Green™ is a program still being developed and marketed. 2020 should be the year for a decision on the value of this concept in the marketplace. It is currently a self-certified program. It may be necessary to develop a 3rd party certification system if the brand is to gain traction.



Double Green product logo.

Continued work in certifying the Tier 2 Manufacturers products which qualify. CARE actively recruits and pursue potential Double Green candidates, a cost benefit analysis of certified companies realizing product sales benefit will be helpful in adding momentum to manufacturer interest.

In terms of product testing, CARE has posted on their website the findings from a GHD Engineering feasibility study (Cycle 1B) on the use of recycled PET carpet and PET fiber products in civil engineering applications. Regarding in-ground septic and stormwater infiltration projects: Each of these water related areas are focusing on particularly challenging wastewater and stormwater contamination concern areas that already exist. The findings show that with proper containment, water quality post filtration is considerably improved. Naturally, a keen eye is being given to previous

concerns raised regarding microfibers and the Brominated Flame Retardants (BFRs) and Per-fluorinated Compounds (PFCs) which include PFAs.

Additionally, in partnership with The University of California – Davis, CARE is working on the use of PC4 as a replacement of cement and cement aggregate sands. This study is designed to test the effectiveness of PC4 and determine if it can meet the ASTM requirements in general concrete applications. This project is being funded by CARE to further test PCC in what appears to be the largest potential market user, the Ready-Mix industry. Results are anticipated in second half of 2020.

Cycle A/B grants, for capital equipment and product testing, are open to participating Program members, businesses qualified to do business in California, non-profit agencies, and local agencies. Cycle M micro-grants are open to California-based nonprofits, private and public business, public agencies and CARE drop-off sites and CSEs.

These grant cycles support capital improvements, product testing/development and collections/reuse that increase:

- Number and capacity of Tier 1 and Tier 2 processors and manufacturers.
- Number and variety of recycled carpet content products available in the marketplace.
- Quantity of recycled output utilized in secondary products.
- Testing and development support for reformulated products, using recycled carpet content to explore new uses for PCC and ensure these products perform as required.
- Increased collection for reuse and processing of PCC through new or existing programs with infrastructure and equipment needs.

The three grant types are as follows:

- **Capital improvement grants:** Cycle 2A, awarded in October 2018, and Cycle 3A, awarded in January 2019, allocated approximately \$4 million in funds to 14 projects, with up to \$500,000 maximum per grant. A second round of funding released under Cycle 3A in June allowed grants up to \$150,000. Eligible expenses included capital improvement, infrastructure, equipment, construction, renovation or expansion of collection, processing or manufacturing facilities that manage or use California-generated PCC. It could also be used for partnerships with the aim of increasing the use of recycled output. The goal is to “increase the quantity (pounds) of California generated PCC that is collected, recycled, and utilized in manufacturing of Tier 2 recycled products” during 2018–2019. California-based projects are prioritized for capital funding. CARE targets 75% of

funds for California businesses, and since the program began, has allocated approximately 90% of funding for California-based projects. Grants also consider highest recyclability during proposal evaluation as required by AB 1158 and during 2019 all highest recyclability qualifying grants received a 15% weighting with a total score of 100%. Approximately 89% of grants funded qualified as highest recyclability projects.

- **Product testing grants:** Cycle 2B allocated funding for projects with budgets up to \$200,000 for activities focused on product testing, research and development, and similar activities that will enhance PCC collection, recycling, and utilization in manufacturing. This applies to feedstock conversion projects, new or reformulated products, or feasibility studies for new uses of PCC materials. The goal is to provide “assistance to eligible applicants to research, develop, and test new products or reformulate existing products produced using PCC material generated in California.” Cycle 2B allocated approximately \$1 million for 2018–2019 implementation, and six projects were active through 2019. Cycle 2B targeted 75% of funding for California projects, however, approximately 40% of applicants were from outside of California. CARE awarded full funding to all California projects that applied under this cycle.
- **Micro-grants for collection/reuse:** Cycle 2M originally offered \$75,000, with a maximum of \$15,000 per project, to California public agencies, nonprofits, public or private businesses, CARE drop-off sites and CSEs for new and existing collection or reuse programs in 2018. The goal is to achieve additional collection or reuse through infrastructure improvements (localized hauling) and/or equipment (weather covers). Six micro-grants were awarded in 2018 to drop-off sites and CSEs and five were completed in October of 2019 (one was declined). Due to the continuing need to increase collections and bring on new drop-off sites, particularly in counties without one site, Cycle 2M stayed open through 2019 and made awards to seven additional projects. In 2019, as a commitment to enhancing convenient collection efforts, CARE expanded their originally planned \$75,000 budget to be able to meet the \$143,000 in requests for Cycle 2M projects. This represents a 91 percent increase in the micro-grants budget in 2019.

Awarded capital improvement and product testing projects represent a significant expansion in California PCC capacity through enhanced or new operations at California as well as out-of-state facilities. CARE projects an additional 76 million pounds of annual recycled or manufactured output starting in 2020 assuming all projects deliver their proposed results. Materials recycled include carpet tile backing (both PVC and polyolefin), nylon 6 and nylon 6,6, PET, PP, and PC4 carpet backing materials. Upwards of thirty-five new FTE jobs have been projected.

Awarded micro-grant projects represent a projected additional annual 8 million pounds of collection starting in 2020. Cycle 2M projects, of which the first five were completed in Q4 2019, produced over 500,000 pounds of additional collections in 2019.

In 2019, CARE continued to manage pilot grant funding (originally Cycle 1A awarded in 2016 for \$225,000) for one California company which is not yet operational and was on a third and final grant extension through the end of 2019. Due to not meeting their 2019 objectives, CARE reabsorbed \$25,000 in retained funds for this project. Future plans for this particular grant will be evaluated in 2020.

Five pilot micro-grants (Cycle 1M) of \$10,000 each were awarded to California-based projects in 2017 and all continued to report additional collected pounds of California PCC in 2019. These projects were for a weather cover to keep carpet clean and dry as well as for ID technology to increase throughput and for containers to increase localized collections. These Cycle 1M projects represent an increase in 2019 collections of approximately 5.75 million pounds.

All criteria for the solicitation of grants (announced via RFP), as well as the criteria used in judging, are posted to the [CARE website](#) grants page and are readily available.

6.2.1 Highest Recyclability

PRC Section 42972(a)(4). Any grants or subsidies provided for the recycling of postconsumer carpet shall be structured to incentivize the recycling of carpet materials that have the highest recyclability.

As of January 1, 2018, the Carpet Stewardship Law requires grants or subsidies provided for the recycling of PCC to be structured to incentivize the recycling of carpet materials that have the “highest recyclability.” Neither the statute nor the regulations specifically define this term, nor do they specify that this provision overrides other goals in the statute, including achieving the goal of a 24% recycling rate by 2020.

As noted in the 2018–2022 Plan, CARE has developed a methodology for analyzing highest recyclability. In turn, that analysis informs an evaluation of the Program’s subsidy and grant structure to ensure that subsidies and grants are incentivizing the recycling of those carpet materials with the highest recyclability, while also ensuring compliance with the entirety of the Carpet Stewardship Law.

CARE, in consultation with the Advisory Committee and CalRecycle, developed a table of recyclability (Plan Table 16C, reflected as Table 5-10 on page 137 in this report) criteria based on PCC market expertise and recycling technology experience regarding the form and purity requirements for various markets.

In late 2018 discussion regarding chemical recycling of PET began, and dialog was initiated to look at expanding the scope of highest recyclability to include all polymers that have closed-loop recyclability, as exemplified by nylon 6, or recycled into other virgin equivalent products based on quality and performance. During 2019, the evolution of PET chemical recycling came to life with long-term contractual commitments by Eastman Chemical for PET pellets produced by a California Processor. **Eastman** has developed a technology through which they will produce new materials with certified recycled content, including textiles, cosmetics and personal care, and ophthalmics.

The context for the Highest Recyclability definitions and the ensuing evaluation reference the mechanical processing of PCC and conversion into the first level of recovered materials (e.g., face fiber, backing fiber, PC4) for further recycling. It does not include collection and sortation, nor does it include the conversion into final products generally referred to as Tier 2 manufacturing in the Plan's three-level recycling scheme.

It should be noted that while residential nylons and carpet tile rank highest in the Plan's Highest Recyclability matrix (Table 5-10), commercial broadloom nylon ranked very low. This is a direct result of construction and processing considerations (throughput and yield). However, it is not practical, based on CSE feedback, to track this category during the sorting process. It is also highly desirable to enable the recycling of this class of nylon. Therefore, commercial broadloom nylons are included within the highest recyclable materials category, especially to facilitate the recovery of nylon 6,6 from this stream. Finally, it is worth noting that commercial broadloom face fiber represents a relatively small impact in today's marketplace of available fiber (<10%).

With the implementation of AB 1158 requirements on Highest Recyclability, CARE voluntarily implemented a subsidy on Nylon 6 and Nylon 6,6 fibers of \$0.05 per pound. Throughout 2019, with the strong end-market demand for nylon coupled with the added Highest Recyclability incentive of an additional \$0.05 per pound an uptick was observed in commercial broadloom recovered for recycling, despite its lower yield and higher processing costs.

To monitor and refine highest recyclability on an ongoing basis, and consistent with Advisory Committee July 2018 Recommendation 1.2, in Q3 CARE formed a Highest Recyclability Committee composed of knowledgeable and experienced professionals in the areas of recycling technology, business and sustainable concepts. The Highest Recyclability Committee will meet no less than annually to evaluate highest recyclability as technology and markets evolve, further refine the criteria as needed with any updates shared with CalRecycle on an as needed ongoing basis.

Following are the description/definitions of the criteria used in Highest Recyclability Table 6 of the approved Plan.

- **Ease of deconstruction** – How easily the PCC can be processed/disassembled into "pure" material components from a mechanical perspective (e.g., glued-down level loop commercial broadloom is much more difficult to deconstruct than cut pile, stretched-in residential carpet).
- **Safely recycled all layer to similar or higher material performance** – Can material components be processed into the same or higher performance products in a manner that protects human and environmental health (e.g., a material returned to the manufacture of new carpet or an under-hood plastics automotive part would be considered equal or higher value).
- **Cost-effectiveness** – How cost-effective is it to process the materials to acceptable purity (e.g., mechanical separation vs. depolymerization). This is different from ease of deconstruction as it is an economic consideration (e.g., dollars per pound of output). This considers the cost per pound of recycled output for various types of carpet and material components.
- **Energy saving** – Does the recycling of the material use less energy and produce lower greenhouse gas emissions (e.g., depolymerization requires higher energy use than mechanical processing). High energy use would receive a low score, and low energy use would receive a high score, inclusive of energy use to transport the material for recycling processes (typically a very small component).
- **Identification of polymer type** – How easy is it to identify face fiber types for separation. (Examples include **materials** more likely to include back-labeling identification of polymer type would score higher; single polymer face fiber carpet products would score higher versus mixed polymers.)
- **Extent of subsidy required** – How the current commodities market value influences the subsidy required to move the **material** in the marketplace. This criterion considers a variety of factors such as geographic source, costs of transportation, price of virgin materials, price and availability of post-industrial (PI) materials, price of competing post-consumer recycled-content (PCRC) materials (e.g., PET bottle flake), quality, volume available, and consistency. Using the conversion cost model (summarized in the Subsidy Justification Model) where such data is available, this is the difference between the cost of recycling and the commodity's scrap value for the recycled material, plus a reasonable financial return. It is a leading indicator of recyclability in terms of market acceptance and demand, and it fluctuates over time.
- **Reusability** – How easily can the materials go to reuse, a higher level in the waste management hierarchy for post-consumer carpet.

- **Recycled into new secondary product** – If not reuse or closed-loop recycling, considers whether or not there are available market options for secondary products. Materials that do not have available markets for **secondary** products and thus have to be landfilled would score lower versus those that do have strong secondary markets. For example, nylon 6,6 polymer has strong secondary available markets compared to wool, which currently has no known markets. Depoly for use in other virgin markets would be considered very high as a result of displacing virgin material and opening the scope for recycle-derived post-consumer materials
- **Market potential for products upcycling** – Looking at the secondary product options for recycled output materials through the lens of highest and best use and potential for upcycling (recycling over and over in a closed loop versus downcycling as a single additional life). Three levels of options include:
 - Closed-loop recycling back into carpet – Recycling of carpet face fiber back into carpet face fiber or backing back into backing (e.g., carpet tile, depolymerized nylon 6, PC4 if used in carpet backing).
 - Non-carpet closed-loop (recycled multiple times) – A secondary, non-carpet product that is or can be recycled over and over (or in principle) (e.g., PC4 into cement, fiber pad, car parts, insulation, decking).
 - Downcycled (one-time) – A one-time additional use of a material which then goes to landfill; this includes materials more likely to go into one-time lower-end secondary applications, such as erosion control products, cat litter, etc.
- **Volume available** – How much of the material is available to be reused or recycled. This criterion is a lens to help understand the key drivers for recycled output volume, particularly from the viewpoint of the **statute’s** short-term goals. For example, PET and nylon 6 face fiber carpet represent 80% of all carpet sold, while PC4 represents 30-40% of the weight of a square yard of carpet and is in nearly all carpet made. Understanding volume availability is essential to knowing what market outlets can be built and supported on a sustained basis and has major implications for investment consideration. This is equivalent to prevalence in the waste stream.
- **Potential for high yield** – When processed, how efficient is the processing/recovery; higher yield means higher **recyclability** and a reduction in disposal. For example: residential broadloom carpet typically has a higher yield per square yard vs. a low pile commercial broadloom carpet or carpet tile.

6.2.2 Grant Program Timeline and Actions Taken in 2019

In addition to extensive grant management tasks, additional actions included:

- Cycle 2M grant solicitation was revised and released to accept applications for projects up to \$15,000 throughout 2019.
- A Notice of Funds Awarded was posted for Cycle 2M and Cycle 3A awardees.
- All Cycle 2 and Cycle 3 grantees completed contracts and submitted quarterly reporting.
- Approximately \$2.5 million was paid out in Cycle 2A, Cycle 3A, Cycle 3X, Cycle 2B and Cycle 2M funds in 2019.
- The Grant Manager distributed information about the grants program at the Greener Builder and California Resource Recovery Association (CRRRA) conferences in 2019.
- Three Cycle 3A round 1 grants were awarded in 2019 and three Cycle 3A round 2 grants were also awarded in 2019 under a revised solicitation that made collections focused projects eligible as well and limited maximum project amounts to \$150,000.
- One Cycle 3X special circumstance highly qualified grant was awarded in 2019 to facilitate a significant recycled output impact via a very large volume PET depoly process technology. CARE did not follow the standard review process as this was a time and technology sensitive opportunity. In addition, this immediate opportunity was designed to demonstrate the feasibility of supplying a high-quality feedstock, and in a reliably sufficient quantity, to support a large deploy operation by a major, global chemical company. CARE's Executive Director worked with the SPC to do a detailed project review. In addition, CARE confidentially reviewed this project with CalRecycle to assure acceptability of the technology platform. A critical and timely decision was made by the SPC to support the initiative which was designed to grow recycled output pounds and supported a new, closed-loop opportunity. CARE and Circular Polymers worked with the company for over a year to bring this opportunity to the stage of scale-up execution.
- During late 2018 and 2019, CARE implemented its Cycle 2A and 3A capital awards respectively, and approximately \$780,000 in funding was not allocated. Additionally, over \$150,000 in Cycle 2 testing funds were not awarded in late 2018, for 2019 project expenses.

- Under the Cycle 2A and 3A Capital Improvements grants guidelines, a company cannot receive more than \$500,000, and one company shall not receive more than one grant per cycle.
- In late 2019, driven by a new opportunity, CARE made the decision to create a special Cycle 3X for Capital Improvements using unallocated funds from Cycles 2 and 3 of testing and capital budgets. These funds would be used for projects that CARE staff identified as having the potential to significantly increase recycled output in 2019 in order to meet its mandate to reach a 24 percent recycling rate by the end of 2019. CARE also made the decision to direct funding to projects that would have long-term potential to significantly increase recycled output through new and innovative markets for post-consumer carpet. A maximum award amount was not established.
- Circular Polymers accepted its award in Q4 of 2019 and signed a Cycle 3X Capital Improvements grant contract, including a Security Agreement, which established a shorter timeline for delivering a more significant amount of recycled output than previous contracts under Capital Improvements cycles.
- CARE may consider reopening its Cycle X program in the future. These projects may be identified by CARE internally, or the Cycle X solicitation may be released to the public and open to applications from entities in or outside of California. Cycle X grants, if employed, will be managed in a case by case basis.

6.2.3 Cycle 3A, Cycle 3X and Cycle 2M 2019 Grantees

Cycle 3 and 3X, Capital Improvement Grant Awardees

- **Circular Polymers**, Lincoln, CA, \$325,000 (Cycle 3) and \$900,000 (Cycle 3X): This Cycle 3 project proposed to use grant funds to expand Tier 1 processing capacity via proprietary RIS technology and a conveyance system which would expand product offerings among all fiber types and PC4 for Tier 2 products. The 3X project also installed a densification system to meet the demand for PCC from Eastman, which uses Carbon Renewal technology to make new materials through chemical recycling. The project commenced operations in December 2019 as planned. Subsequent modifications are underway.
- **Green Waste Carpet Recycling**, San Jose, CA, \$150,000: This project will purchase equipment to expand its carpet recycling operation in San Jose in terms of throughput and collections. Note: This project was delayed until mid-2020 due to permitting challenges causing project reconfiguration.
- **LA Fiber**, Los Angeles, CA, \$500,000: Grant funds would be used for further Tier 1 processing capacity to purify PC4 and increase yield over 30 percent. This

project would also reduce facility dust. Note: This project was slated to come online in August 2019. Due to permit delays by the City of Vernon, the project will not be completed until mid-2020.

- **Moto's Transportation**, Sacramento, CA, \$150,000: The grant funds purchased trucking equipment and containers to expand collections at retailer locations near Sacramento.
- **Planet Recycling**, San Diego, CA, \$150,000: This project purchased equipment to expand its carpet recycling operation around San Diego in terms of throughput and collections.
- **Visions Environmental**, Oroville, CA, \$290,000: Grant funds are being used to purchase mixing, drying, crushing and screening equipment for Tier 2 manufacturing using PC4 in Double Green™ products. Products include primarily those using lightweight aggregate.

6.2.4 Cycle 2M, Micro-Grant Awardees

- **Atlas Disposal**, Sacramento, CA, \$15,000: Grant funds will be used to purchase six containers to collect carpet at sites around the Sacramento area.
- **Hayward Transfer Station**, Hayward, CA, \$15,000: Grant funds will be used to purchase four containers to collect carpet at sites around the Bay Area.
- **Highway 59 Landfill**, Merced, CA, \$13,000: This project is located at a new site in a new county and will build a covered structure to keep PCC clean and dry.
- **Monterey Regional Waste Management District**, Marina, CA, \$13,983.67: Grant funds will be used to build a weather-protected structure at this new site to keep PCC clean and dry.
- **Napa Recycling and Disposal**, American Canyon, CA, \$15,000: Grant funds are earmarked for a new covered structure at Delvin Road as well as for sides on an existing structure at Levitin Way to keep PCC clean and dry.
- **Salinas Valley Recycles**, Salinas, CA, \$10,000: A grant was awarded for the purchase of two covered containers to keep PCC clean and dry at the staging area and between swap-outs.

Following is an overall summary of **Capital Improvement Grants (Cycle A)** from the start of the program through 2019 in addition to those listed above in Section 6.2.2 under Cycle 3. If funds awarded were not fully paid out by the end of 2019, the actual amount paid through 2019 is noted.

Table 6-1. Summary of Capital Improvement Grants (Cycle 1A)

Cycle 1A (2016–2017)	Location	Term End	Funds Awarded
American Fiber Cushion	Dalton, GA	3/31/2017	\$250,000
Carpet Solutions	Carson, CA	End 2017	\$375,000; \$351,550 paid
CLEAR/Circular Polymers	Lincoln, CA	3/31/2017	\$500,000
SafePath Products	Chico, CA	3/31/2017	\$462,000
Sierra Rubber Products	Modesto, CA	3/31/2017	\$218,500; \$147,769 paid
XT Green	Rancho Cucamonga, CA	End 2019; extended	\$250,000; \$225,000 paid

Table 6-2. Summary of Capital Improvement Grants (Cycle 2A)

Cycle 2A (2018–2019)	Location	Term End	Funds Awarded
Aquafil	Woodland, CA	End 2019	\$500,000; \$450,000 paid
Arropol	Dalton, GA	6/30/2020; extended	\$194,000; \$138,600 paid
Circular Polymers	Lincoln, CA	End 2019	\$500,000
Green Hive Group	Chico, CA	End 2019	\$204,234; \$192,925 paid
Interface	Woodland, CA	End 2019	\$160,021; canceled
LA Fiber	Los Angeles, CA	6/30/2020; extended	\$500,000; \$494,000 paid
SaN Pallets	Troy, OH	End 2019	\$250,000; \$225,000 paid
Visions Environmental	Oroville, CA	End 2019	\$260,360

Table 6-3 and Table 6-4 summarize the overall **Product Testing Grants (Cycle B)** from the start of the program through 2019. If funds awarded have not been fully paid out by the end of 2019, the actual amount paid through 2019 has been noted.

Table 6-3. Summary of Product Testing Grants (Cycle 1B)

Cycle 1B (2016–2017)	Location	Term End	Funds Awarded
<i>Carpet Solutions (canceled)</i>	<i>Carson, CA</i>	<i>3/31/2017</i>	<i>\$24,000; \$0 paid</i>
GHD, Inc.	Santa Rosa, CA	3/31/2017	\$145,984
<i>South Bend Modern Molding (canceled)</i>	<i>South Bend, IN</i>	<i>3/31/2017</i>	<i>\$50,000; \$0 paid</i>

Table 6-4. Summary of Product Testing Grants (Cycle 2B)

Cycle 2B (2018–2019)	Location	Term End	Funds Awarded
3B Protection	Perris, CA	May 2020; extended	\$200,000; \$137,134 paid
CMJ Systems	Phoenix, AZ	End 2020; extended	\$198,600; \$57,369 paid
ReFiber	Sacramento, CA	June 2020; extended	\$36,600; \$8,187 paid
Swisstrax	Indio, CA	End 2019	\$164,750
Verdex	Richmond, CA	End 2019	\$195,000; \$174,985 paid
Visions Environmental	Oroville, CA	End 2019	\$50,147; \$33,413 paid

Table 6-5 and Table 6-6 summarize **Micro-Grants for Collections/Reuse Programs (Cycle M)** from the start of the program through 2019. If funds awarded have not been fully paid out by the end of 2019, the actual amount paid through 2019 has been noted.

Table 6-5. Summary of Micro-Grants for Collections/Reuse Programs (Cycle 1M)

Cycle 1M (2017)	Location	Term End	Funds Awarded
Circular Polymers	Sacramento, CA	6/30/2018	\$10,000
Green Waste Recovery	San Jose, CA	6/30/2018	\$10,000
Napa Recycling and Waste Services	Napa, CA	End 2017	\$10,000
Planet Recycling	San Diego, CA	6/30/2018	\$10,000
Zanker Florin Perkins	Sacramento, CA	End 2017	\$10,000

Table 6-6. Summary of Micro-Grants for Collections/Reuse Programs (Cycle 2M)

Cycle 2M (2018–2019)	Location	Term End	Funds Awarded
Atlas Disposal	Sacramento, CA	6/30/20	\$15,000
City of Berkeley	Berkeley, CA	Oct 2019	\$14,000; \$12,620 paid
City of LA	Los Angeles, CA	Oct 2019	\$13,000; \$10,026 paid
Hayward Transfer Station	Hayward, CA	6/30/2020	\$15,000; \$0 paid
Highway 59 Landfill	Merced County, CA	10/30/2020	\$13,000; \$5,706.97 paid
Monterey Regional Waste Management District	Marina, CA	10/30/2020	\$13,984; \$13,794.78 paid
Napa Recycling and Waste Services	Napa, CA	10/30/2020	\$15,000; \$0 paid
San Joaquin County	Lovelace and North County facilities	Oct 2019	\$14,064
Sun Street Transfer	Salinas, CA	10/30/2020	\$10,000; \$0 paid
Zanker Florin Perkins	Sacramento, CA	Oct 2019	\$15,000
Zanker in San Jose	San Jose, CA	Oct 2019	\$15,000

6.3 Measuring Market Development

Market development is currently measured in two primary ways: the number of Tier 2 pounds used in the manufacture of recycled products, as reported by Tier 2 manufacturers; and the number of products containing PCC recycled content, as self-reported by participating or non-participating manufacturers.

2019 saw slight decline in Tier 2 manufacturer use of non-nylon recycled output in products that have shipped and sold. Tier 2 manufacturer non-nylon pounds shipped and sold decreased from 21.5 million pounds in 2018 to 19.1 million pounds in 2019, an 11.5% decrease (see Section 5.11, Figure 5-14). This unanticipated decrease primarily correlated with a decreased demand for PP pellets and a significant PET market sector fallout in relaxed decking due to the sale of the Fiber Commercial Technologies decking business. The sale of this company did not include or allow for the continued manufacturing of their PCC recycled material product line. This was a major setback for PET fiber demand growth.

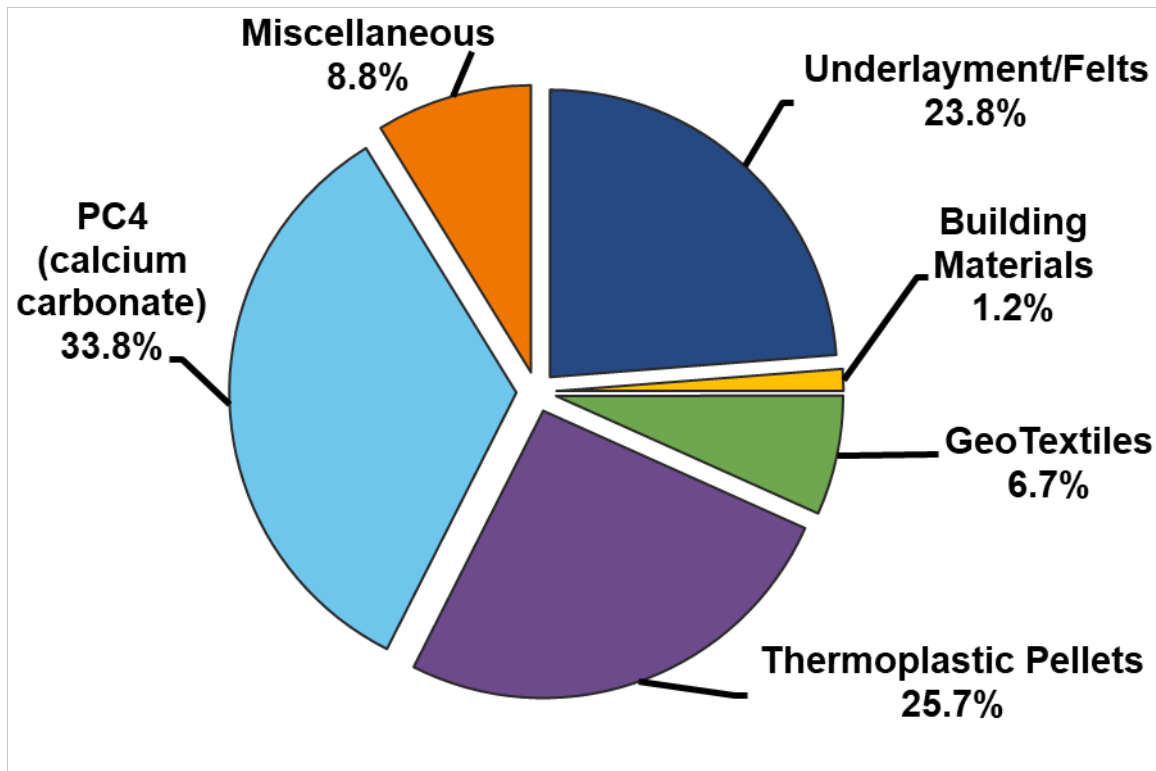
As anticipated, the Tier 2 nylon 6 subsidy, coupled with the new Highest Recyclability incentive added in 2019, continued to spur growth. The nylon pounds shipped and sold increased significantly to 8.5 million pounds in 2019, over the 3.2 million pounds in 2018, reflecting an increase of nearly 164% on nylon shipped and sold data (see Section 5.7). This subsidy enables the Program to further track secondary use of nylon 6 in Tier 2 manufacturing. Nylon 6,6 use in secondary products was not initially tracked by the Program, although changes in reporting adopted in mid-2018 began capturing Type 1 recycled output by polymer type. In addition to Tier 2 manufactured pounds, Tier 1 processors PC4 pounds shipped and sold for use in secondary products increased from 12.5 million pounds in 2018 to 14.0 million pounds in 2019, a 12% increase.

A total of twenty Tier 2 manufacturers registered and/or participated in the subsidy program in 2019, a 17.6% increase over the 17 registered and participating in 2018. Additional secondary manufacturers may utilize recycled output produced by Tier 1 processors in the manufacture of secondary products—such as Sierra Mat & Rubber, SafePath Products, and Visions Paint—but may not participate in the subsidy program.

The number of non-nylon products shipped and sold during 2019 continued to increase, offering a variety of products by Tier 2 manufacturers. Subsidies for non-nylon payouts in 2019 increased again by nearly 15% over 2018. Participating Tier 2 manufacturers reported 6 unique non-nylon product categories as illustrated in Figure 6-2.

Notable changes for product output categories include a 95% decrease in building materials, which represented 23.6% in 2018 and only 1.2% in 2019. As noted previously, the primary factor precipitating this drop was the sale of Fiber Commercial Technologies and resultant discontinuation of PCC-content relaxed decking fabrication.

Figure 6-2. Product Output Categories



Currently reported recycled products fall into six main product categories:

- 33.8% PC4 (used in variety of products such as rubber mats, transition ramps and aggregate).
- 1.2% building materials (such as insulation and plastic lumber).
- 23.8% underlayment/felts (such as carpet cushion).
- 25.7% thermoplastic pellets (including PP and N6, used in a variety of new plastic products).
- 6.7% geotextiles (such as erosion control products).
- 8.8% Miscellaneous (such as bedding and packaging).

Manufacturer listings are voluntary and may not include all available products containing California recycled PCC.

As part of the new AB 1158 requirements, CARE has defined a minimum content percentage contained in Tier 2 manufacturing products; this is to qualify the products as a certified PCC Content Product. In response to Chapter 0 requirements for the 2018–2022 Plan, CARE completed a PCC survey of 24 companies, with 20 respondents who are presently receiving CARE manufacturer subsidies. Of those respondents, 40% reported using 50% or more PCC-content in their products. CARE supports establishing

a 10% PCC recycled-content goal by 2025; however, maintaining currently established end market uses is critical for ongoing recycling rate growth and overall market stability. The current minimum PCC weight of products begins at 3% by content and an annual minimum of 25,000 pounds. The integration of multiple products of lower weight provides a strong foundation for building broader market impact. CARE expects to slowly increase over time the minimum weight content to 10% and 100,000 pounds annually qualify as a PCC content product. All PCC content must be sourced from California.

CARE completed its Double Green™ product certification with the Patent and Trademark Office. This certification process requires a minimum 10% PCC content plus minimum 10% other postconsumer content. As the program gains traction CARE does intend to build a California Gold level of certification which will require the minimum 10% PCC content be sourced exclusively from California.

6.4 Product Development and Available Recycled Products

The following companies took steps to develop new products using California recycled output in 2019:

- **Reliance Carpet Cushion** undertook several efforts to find alternative uses for carpet cushion (needle punch felt), ranging from underlayment for various hard surface applications to grant research work for various types of filtration and water run-off measures.
- **Los Angeles Fiber Company** conducted strategic testing efforts in partnership with the cement industry on PC4 which successfully resulted in a mutually beneficial long-term materials use agreement.
- **Circular Polymers** is working with Eastman Chemical located in Tennessee to densify product which is then broken down to basic chemical building blocks for new products and materials. With the support of CARE grant funding, pellet production for this outlet began in Q4.
- **Circular Polymers** is working with **GC Products, Inc.**, located in Lincoln, CA, on the use of PC4 in a variety of architectural products.
- **Green Hive Group**, affiliate of **SafePath Industries**, manufactured and marketed their 100% carpet-derived absorbent, **AbsorbsWell**.
- **SaN Pallets**, with the support of CARE grant funds, manufactures plastic pallets.

Companies that continue to offer products using California recycled output in 2019 (a full listing including product lines is included in Appendix):

- **American Fiber Cushion**, located in Dalton, GA, uses PET to manufacture carpet cushion.
- **Aquafil**, located in Phoenix, AZ, uses Nylon to manufacture pellets which are eventually converted to make their ECONYL® nylon fiber for use in carpets and textiles.
- **Bonded Logic**, located in Chandler, AZ, uses PET to manufacturer insulating products.
- **Carpet Cycle**, located in New Jersey, manufactures **Quiet-Tech** Eco-Friendly Acoustic Insulation made of 85–90% post-consumer recycled materials, including PCC. This is a Double Green™ labeled product, containing recycled California PCC plus at least one other post-consumer recycled material.
- **Chasen**, located in New Jersey, utilizes recycled output fibers to manufacture insulating and acoustic materials.
- **Circular Polymers**, located in Lincoln, CA, uses nylon, polypropylene PET to manufacture pellets which is utilized in a variety of secondary plastic products.
- **Columbia Recycling**, located in Dalton, GA, uses nylon and polypropylene in melt-filtered pellets for use in a variety of secondary plastic products.
- **GeoHay**, located in Inman, SC, uses recycled output in storm water and waste management products that protect against erosion, curb inlet filters to avoid storm drain flooding and in hydrocarbon erosion products.
- **Green Hive Group** located in Chico, CA, manufactures AbsorbsWell Absorbent utilizing 100% PC4.
- **Interface**, **Shaw**, and **Tarkett**, all located in Georgia, to the best of CARE's knowledge, use recycled post-consumer carpet tile in their new carpet tiles, a closed-loop, carpet-to-carpet recycling application. In some cases, only the backing may be recycled due to contamination of the face fiber.
- **Leggett & Platt**, located in Texas, uses recycled output in their underlayment products.
- **Manassas Polymers**, located in Calhoun, Georgia, uses nylon, to manufacture pellets which is utilized in a variety of secondary plastic products.
- **MP Global Products**, located in Norfolk, NE, uses recycled output in its carpet underlayment and insulated packaging.

- **Miura Board**, located in Kountze, TX, utilized recycled output in the manufacture of their 100% recycled-content wood alternative products.
- **Reliance Carpet Cushion**, located Los Angeles, CA, uses the recycled PET carpet materials to manufacture its EcoSoft carpet cushion.
- **SafePath Products**, located in Chico, CA, manufactures ADA transition products out of recycled crumb rubber and incorporates PC4.
- **SaN Pallets**, located in Troy, OH, manufactures recyclable plastic pallets out of densified PET fibers.
- **Sierra Mat & Rubber**, located in Modesto, CA, produces mats, wheel stops and landscape pavers of rubber, plastic and post-consumer carpet. This is a Double Green™ labeled product, containing recycled California PCC plus at least one other post-consumer recycled material.
- **Sustainable Polymers**, located in FL, uses nylon, to manufacture pellets which is utilized in a variety of secondary plastic products.
- **SwissTrax** located in Indio, CA, uses pulverized PET fibers to manufacture interlocking flooring panels.
- **3B Protection**, located in Perris, CA, manufactures ballistic and blast proof products for a wide range of applications.
- **Vision Quality Coatings**, located in Oroville, CA, uses PC4 to manufacture light weight aggregates for the construction and decorative industries.
- **Wellman Advanced Materials**, located in Johnsonville, SC, uses nylon recycled output, to manufacture pellets which is utilized in a variety of secondary thermoplastic products, including in the automotive industry.
- **Wetsel Oviatt Recycling**, located in Elk Grove, CA, uses recycled output fiber to create stormwater filtration media.

6.5 Market Development and Outreach

In 2019, CARE's Market Development Manager, Rob Thiess and other CARE Team members participated in a number of conferences and meetings on behalf of the California Program to further the conversation about recycled carpet products:

- Presented program efforts and hosted a well-attended booth at California Resource Recovery Association annual conference.
- Tabled at GreenerBuilder conference in San Francisco with purpose of promoting recyclability of carpet and availability of green building products to architects,

builders, facilities managers and others in green building sector. Most did not know carpet could be recycled and showed significant interest in PCC recycled-content products displayed.

- Hosted a high-level attendance booth at Greenbuild Expo in Atlanta promoting carpet recyclability and use of PCC recycled-content products.
- Conferred with CalRecycle Local Assistance and Market Development staff on [CARE.Ecomedes](#) website, SABRC and Buy-Recycled efforts to plan for expanding recycled-content construction products promotion through Department of General Services staff.
- Participated in discussions with engineers and facility managers from a major hotel chain on potential of carpet materials being recovered, processed and mixed into various on-site cementitious materials (CARE-Crete™). Trial testing took place on the hotel's roof surface for insulation properties along with patch repair testing in the parking lot, utilizing PCC materials. Test results are being reviewed.

Marketing/Communications agency Gigantic Idea Studio assisted with market development in 2019, including the efforts described below.

6.5.1 Business/Marketing Assistance

As part of CARE's support for grantees, consultant Gigantic Idea Studio offered marketing/outreach advice and assistance to grantees in 2019, including:

- **Circular Polymers** – Conference advertising, earned media efforts, conference presentations, website content, video editing, and flyer design. Marketing assistance supported promotion of PCC as feedstock materials to various product manufacturers.
- **SafePath** – Design and strategy advice on collateral, website and packaging for AbsorbsWell product. Marketing assistance supported development of new PCC recycled-content product launch and product promotion.
- **3B Protection** – Video creation and editing; flyer and presentation content, design and format. Marketing assistance supported new PCC recycled-content product launch and product promotion.
- **Visions Environmental** – Logo design and product line website content, design and launch. Marketing assistance supported new PCC recycled-content product launch and product promotion.

Overall PCC Product Promotion marketing efforts included:

- An updated Recycled Carpet-Derived Products catalog. Increase of four companies over the 2018 edition. Mailed to over 1,700 procurement officials in the state.
- A sustainable products web page on procurement portal Ecomedes.com – promoted as CARE.Ecomedes.com
- In-person outreach to target government agency procurement professionals to support public sustainable procurement efforts.
- Ads placed in *California Building News* and CAPPO Directory
- In-person outreach visits to retailers, installers and the public now incorporate information about PCC products, along with samples.

In addition to the above, Gigantic Ideas Studio provided extensive support on grants related communications.

7 Financing Mechanisms

CCR Section 18944(a)(7). Financing Mechanism. *The annual report shall include a description and evaluation of the program's financing mechanism, including whether or not the funding was sufficient to recover, but not exceed, the full cost of the stewardship program. The annual report shall include, but not be limited to, the following total program cost information, and include any supporting documentation. Any proposed change in the amount of the carpet stewardship assessment fee must be submitted to the department for re-approval (See Section 18943 Criteria for Plan Approval)...*

7.1 Total Program Cost

CCR Section 18944(a)(7)(A). Total Program Cost

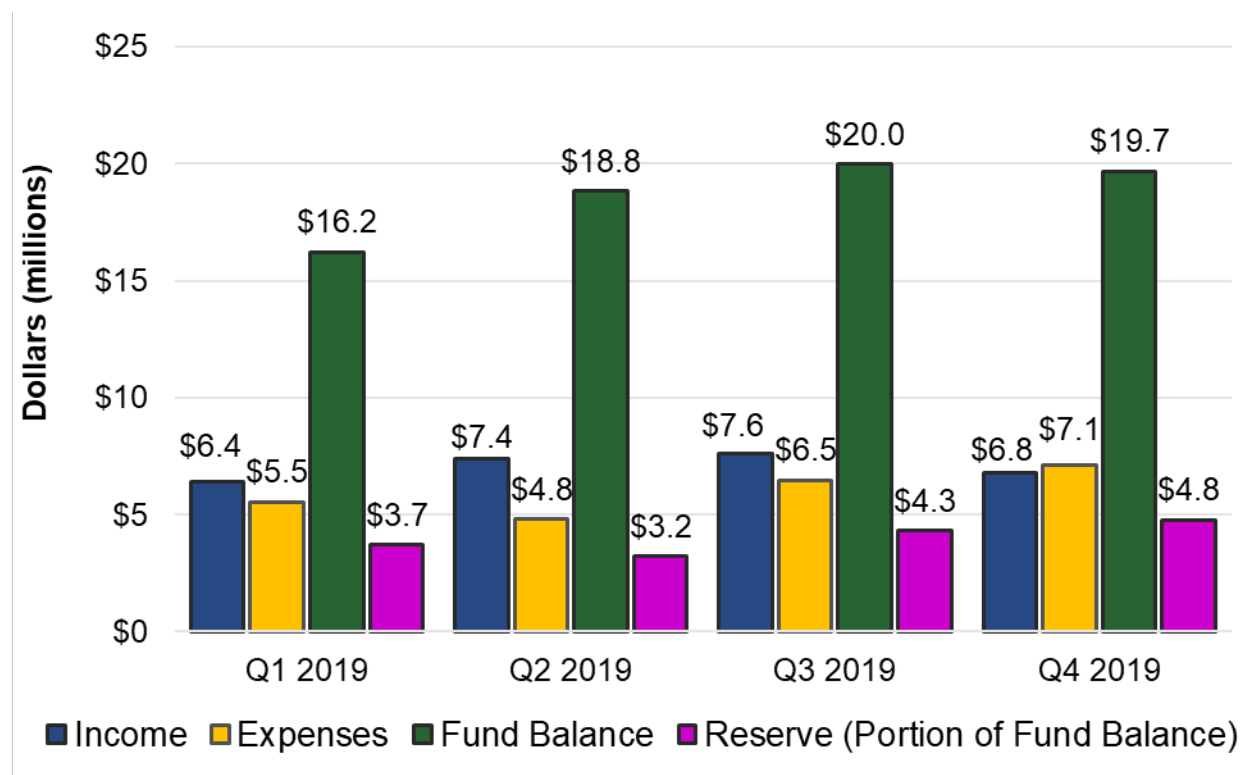
The following numbers are reported in accordance with the accrual basis accounting method:

- **2019 Starting Balance: \$15.4 million**
- **2019 Total Income: \$28.3 million**, comprised of \$28.2 million in assessment remittances paid by participating carpet mills and interest income of \$104,861.
- **2019 Total Expenses: \$24.0 million**
 - 60.8% Program Subsidies
 - 2.2% Administration: includes Program Administration (0.1%) and CalRecycle Fees (2.1%)
 - 4.6% Direct: includes Salaries and Benefits (3.4%) and Support (1.2%)
 - 4.7% Drop-off Site (Collections) Program
 - 4.6% Technical Assistance
 - 16.1% Grants
 - 4.7% Education and Outreach
 - 2.2% Legal and Accounting
 - 0.1% Advisory Committee
- **2019 Ending Balance: \$19.6 million**
- **2019 Ending Program Reserve: \$5.0 million**, 25.7% of ending balance

Funding was sufficient to cover all costs. Excess revenue was a result of two factors, an increase in the recycling assessment from \$0.25 per square yard to \$0.35 and lower than budgeted recycled output and thus subsidy payouts. The excess funds were incorporated into the new 2018–2022 5-Year Plan to help ensure a balanced budget as required. With the approved Plan, and through utilization of CARE’s Budget Model, the program adjusted its reserve calculation to equal a two-month average of total program expenses over the last quarter (last 3 months divided by 3, multiplied by 2). Over the 5-Year Plan excess funds will be reduced such that the balance will be the calculated Plan reserve at the end of 2022.

Figure 7-1 summarizes the revenues, expenditures, and fund balance retained by quarter throughout 2019. It also summarizes the Reserve, a portion of the Fund Balance that comprises most of surplus funding (see Section 7.10). Note, Program revenue is realized through the sale of new carpet which are seasonal and reflected as the reported income.

Figure 7-1. Program Remittances, Expenditures, and Balance Over Time



7.2 Cost per Capita

CCR Section 18944(a)(7)(B). Cost (\$)/capita

Based on California's population of roughly 39.78 million persons in 2019,⁶ the \$24.0 million expended in 2019 on total Program expenses accounts for approximately \$0.60 for each Californian, a 27.7 % increase from \$0.47 from 2018.

7.3 Cost per Pound Collected

CCR Section 18944(a)(7)(C). Cost (\$)/pound collected

On a total program cost basis, gross collections of post-consumer carpet totaled 82.1 million pounds in 2019. An average of 2.06 pounds of PCC was recovered per capita. Based on **total Program funds expended** in 2019 (\$24.0 million), the total Program cost per pound collected is \$0.30 per pound, a 50% increase over the cost per pound in 2018 at \$0.20 per pound.

Looking exclusively at the direct costs (transportation, storage, and CSE recycling fees) of the Program's public drop-off collection sites, the cost per pound collected was \$0.10 per pound in 2019, a 17% decrease from \$0.12 per pound in 2018 (see Section 4.2). For reference, the per-pound costs were \$0.10 in 2017, \$0.16 in 2016, and \$0.17 in 2015. The cost per pound decrease, despite increased PCC tonnage collected, and related hauling and recycling fees, is a direct result from an overall cost savings realized from a 2018 transition from two PCC container transport companies to one. Section 4.2 provides additional discussion of the collection program.

Urban vs. Rural Drop-off Site Collection Costs per Pound

2018	Urban \$0.12	Rural \$0.18
2019	Urban \$0.08	Rural \$0.21

⁶ Per-capita estimate is based on California Department of Finance population data of 39,782,870 for California at 12/31/2019.

In 2018, CARE began tracking direct costs for Urban versus Rural collection sites in the public drop-off collection program, and the respective per-pound costs are \$0.12 and \$0.18. For 2019, Urban costs decreased to \$0.08 per pound and Rural costs increased to \$0.21 per pound. Rural program costs are found to be higher due to smaller volumes captured over a longer period, container storage fees and greater transport distances. Conversely, Urban program costs generally relate to larger volumes captured in shorter time frames, lower container storage costs (containers swapped out quicker) and shorter transport distances. Again, these costs reflect direct drop-off program costs, not overall program costs (e.g., subsidies, payroll, grants, etc.)

7.4 Education/Communications Costs

CCR Section 18944(a)(7)(D). Education/Communications (% of total program cost)

To maintain engagement with multiple stakeholder groups, with widely different perspectives and agendas, the approved 2018–2022 Plan included a forecast budget for marketing, outreach and communications at \$1,345,000 in 2019 (of which \$1,141,238 was expended). 2019 expenditures under this category include the expenses for the appointed Carpet Advisory Committee. Total expenditures under this category equate to 4.7% of the total expenses incurred in 2019, down slightly from 5.4% in 2018 (see Figure 7-2 and Figure 7-3).

Although an overall budget is authorized by CARE by subcategory, actual expenditures may be adjusted over the course of each year in response to dynamic program conditions, new educational opportunities or other factors. Overall actual education and outreach expenditures in 2019 were slightly lower than anticipated.

While education and communications activities are designed to support program goals, the Program relies primarily on subsidy expenditures as the principal mechanism for achieving increased recycled output, diversion and other program goals, consistent with figures below. Efforts continue to explore ways to tie education/outreach activities to operational performance metrics.

Figure 7-2. Total Program Expenses, 2018 and 2019

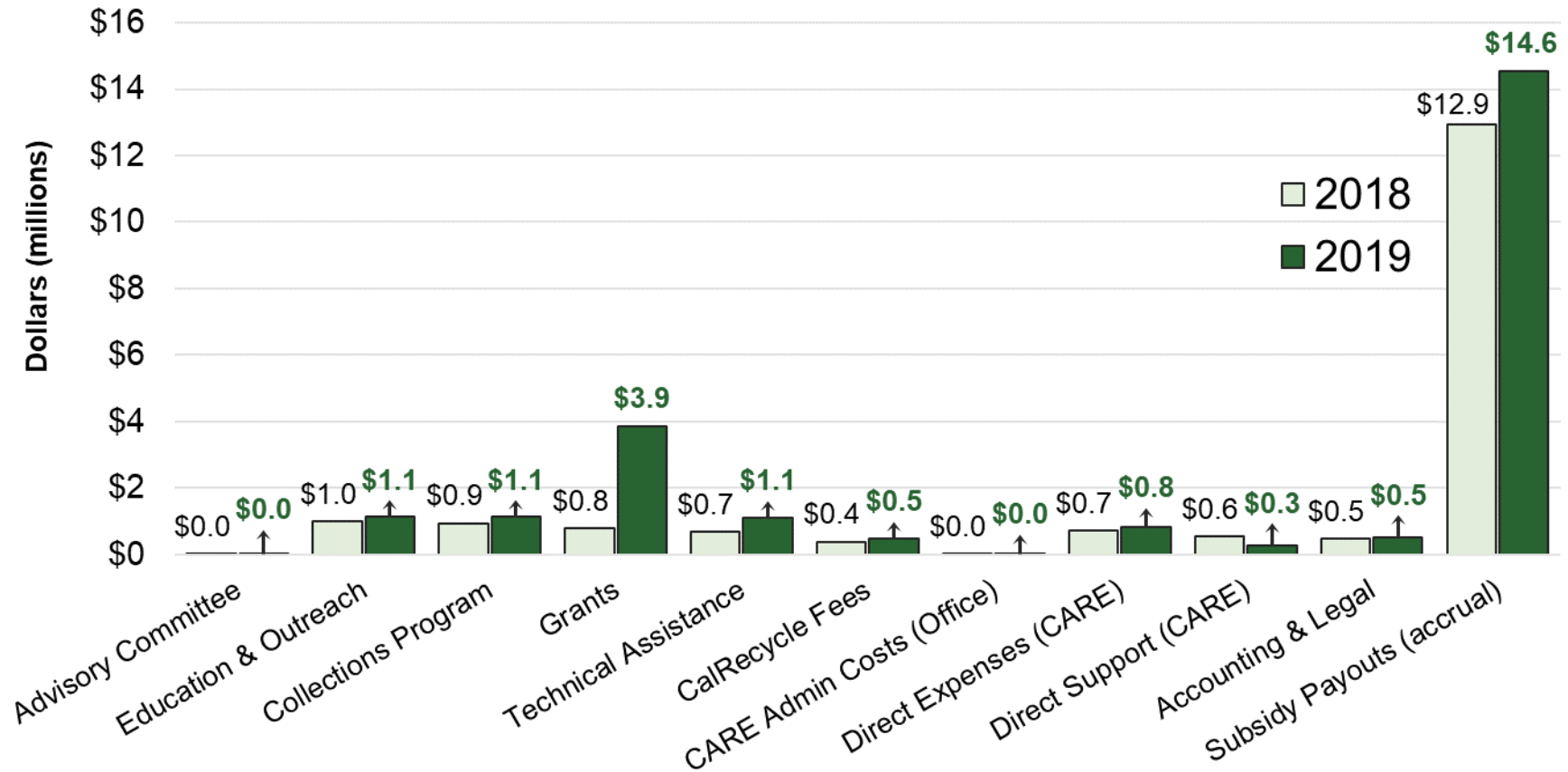
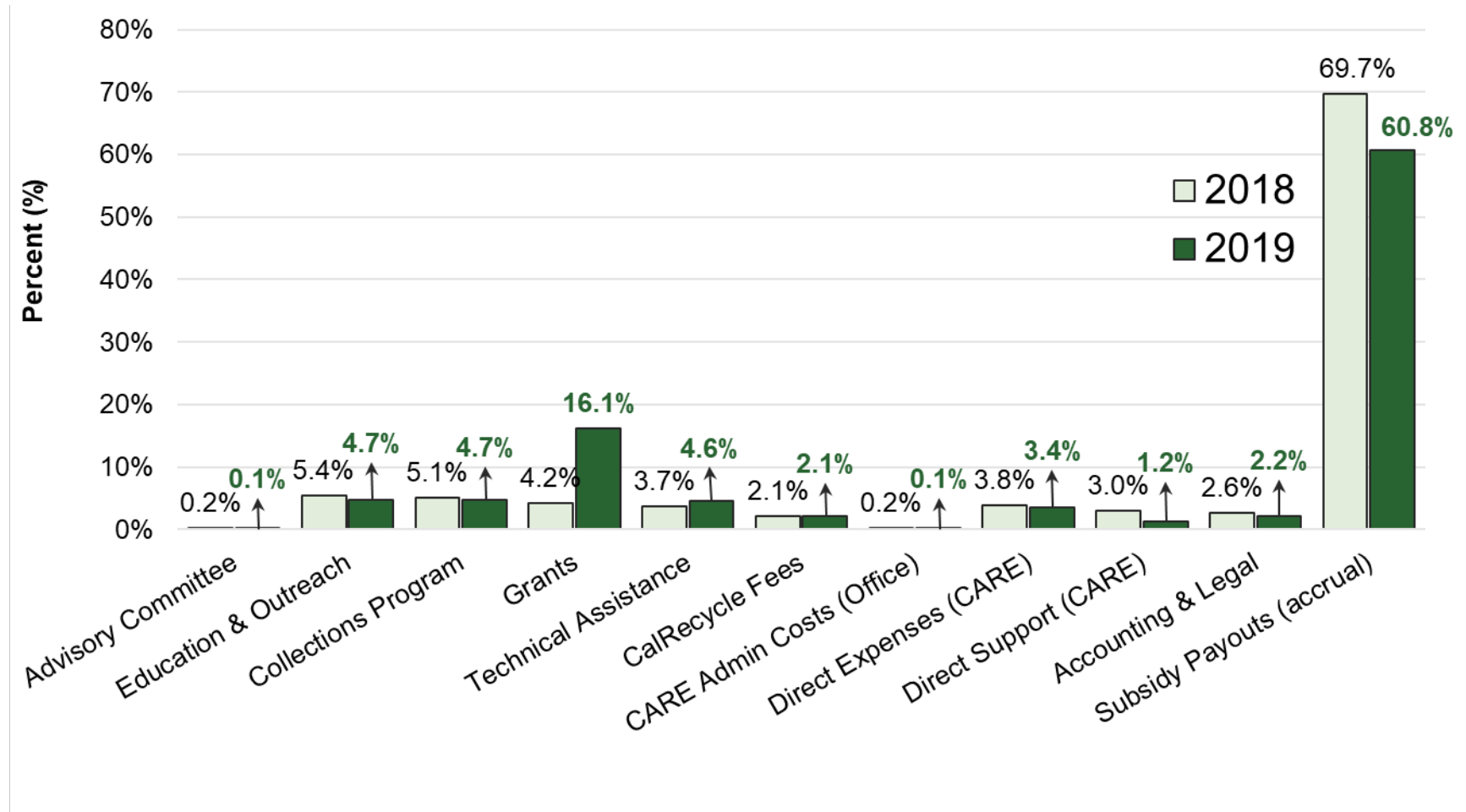


Figure 7-3. Percent of Program Expenses, 2018 and 2019



In an effort to provide greater program expense detail in both figures above, CARE has chosen to break out general CARE Admin Costs from Direct program expenses and support.

7.5 End-of-Life Materials Management Costs

CCR Section 18944(a)(7)(E). End-of-life materials management (% of total program cost).

For the purpose of this report, end of life (EOL) is defined as activities occurring at the point when a product is discarded by the consumer or the end of the useful life of a product, whichever comes first. EOL disposition options include such activities as reuse, recycling, secondary product manufacturing, energy recovery, incineration, and landfilling. In 2019, \$19.9 million in Program resources were directed to support EOL materials management in the following amounts:

1. **Gross Collections** – The California Program expended \$1,126,901 on operational support for 73 drop-off sites in 50 participating counties (see Section 4.2). This is an increase of 19.5% from the \$943,035 spent on the Collections Program in 2018.
2. **Grants** – In addition to final payouts on Cycles 2A/2B/2C grants from Q4 2018, supporting collection, recycling, and secondary manufacturing infrastructure and product testing, Cycles 3A/3X were also awarded in support of collections and capacity expansion. In 2019, a total of \$3,866,319 of grant funds were expended, a 395.8% increase from the \$779,805 expended in 2018. Grant terms continue into 2019; remaining grant balances, including retention funds, are expected to be expended in 2020. It should be noted that accounting rules stipulate funds committed in 2019 and paid in 2020 must be accounted for in the 2019 financials. The significant increase in grants payouts is attributed to timing of Plan approval and commitment to meeting the required 24% recycling rate by January 1, 2020. Two previously denied requests to CalRecycle for permission to release grant funds to build critical capacity to meet 24% recycling rate expectations necessitated aggressive grant funding actions in 2019.
3. **Recycling** – The bulk of Program resources support the conversion of gross collections into recycled output materials by participating Tier 1 processors and use of generated recycled output as feedstock by Tier 2 manufacturers. In 2019, \$14.2 million was paid through the following subsidies and incentives supporting recycling (see Figure 7-4 and Figure 7-5):
 - a. **Tier 1 Processor Subsidies**, Total: \$7.5 million
 - i. **Tile recycled** by Processors: \$59,933
 - ii. **Type 1 Processor recycled output** (recycled output within ash content thresholds, currently less than 25% ash): \$4.2 million

- iii. **Type 2 Processor recycled output** (recycled output with higher ash content thresholds, currently more than 25% ash): \$6,429
- iv. **Highest Recyclability**: \$795,035
- v. **PC4 Processor recycled output** in 2019: \$2.4 million
- b. **Tier 2 Manufacturer Subsidies**, Total: \$5.6 million
- c. **Collector/Sorter Entrepreneur (CSE) Subsidies**, Total: \$1.43 million
 - i. **Reporting incentive**, and CSE whole carpet and tile recycling collection subsidy: \$1.4 million
 - ii. **Reuse Subsidy CSEs** (broadloom and carpet tile): \$71,682
- 4. **Energy Recovery** – Waste-to-Energy (WTE) does not receive subsidy payouts under the current Plan. In 2019, Carpet As Alternative Fuel (CAAF) and Kiln saw no payouts. (See additional discussion related to Kiln pounds and expenditure in Section 5.6.4 and Section 7.9.1.)
- 5. **Incineration** – No incineration was reported during the reporting period. No subsidies are offered for incineration.
- 6. **Disposal** – Disposal figures are reported in Section 5.6.5. No subsidies are offered for disposal.

Figure 7-4. Program Expenditure Ratios (millions), 2019

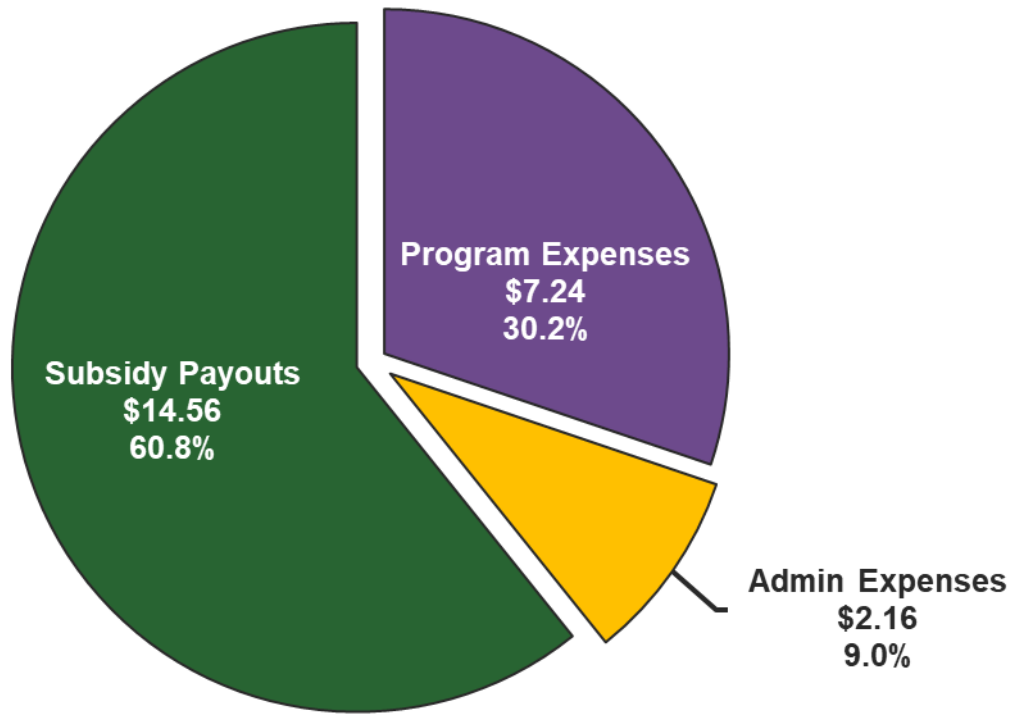
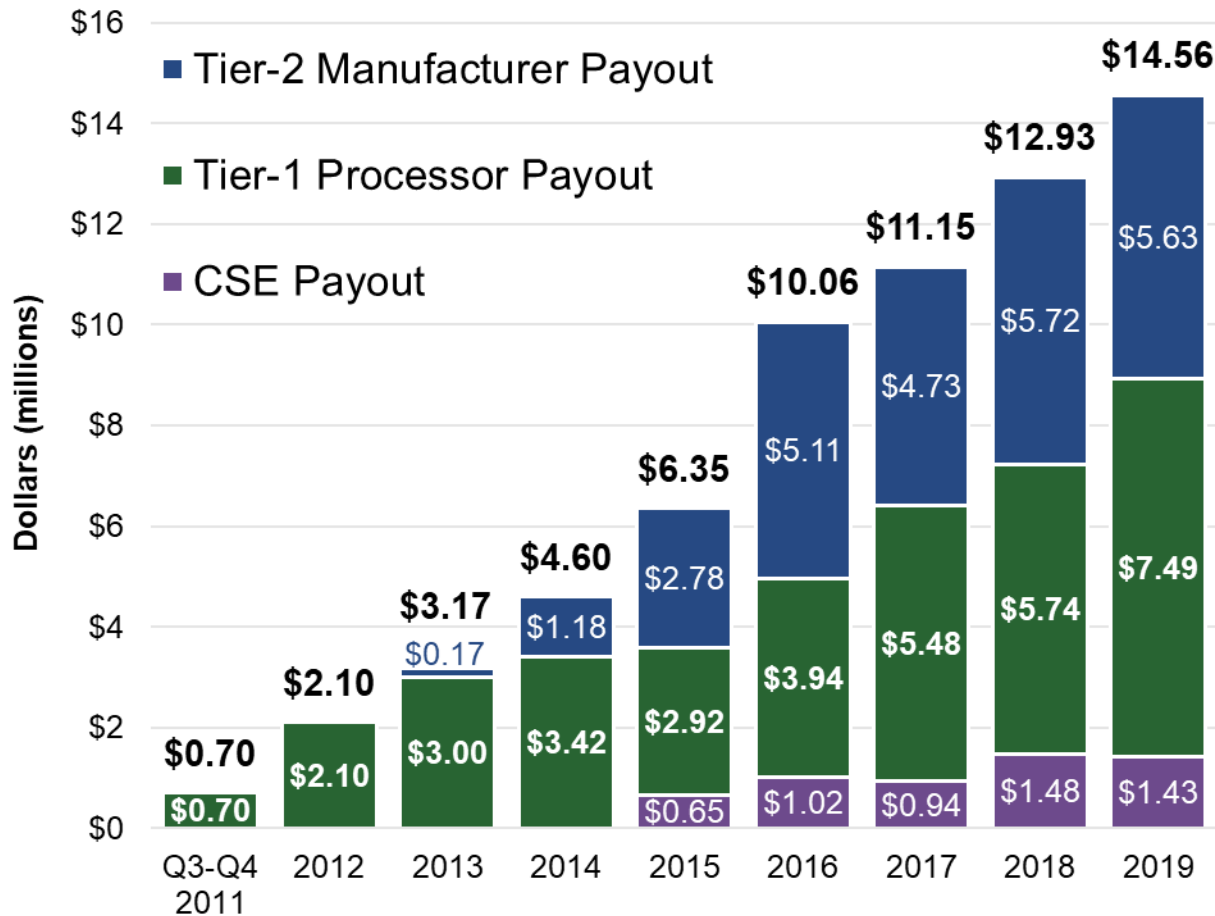


Figure 7-5. Summary of Subsidy Funds Paid to Participants Over Time by Type



In response to an Advisory Committee recommendation, Table 7-1 has been restructured to summarize both planned and actual pounds and expenditures according to each subsidy category. It should be noted that budgets are best estimates and vary considerably as the year progresses due to market, technology, and unexpected event forces at play.

Table 7-1. Pounds and Subsidies Paid by Type (Budgeted and Actual)

Type	Pounds Actual	Pounds Budgeted	Delta	Subsidies Paid	Subsidies Budgeted	Delta
CSEs						
CSE Reporting Incentive	N/A	N/A	N/A	\$52,000	\$48,000	\$4,000
Tile Recycled or Reuse SUBSIDY PILOT	1,532,425	1,278,975	253,450	\$76,621	\$63,949	\$12,673
Tile REUSE	593,353	533,755	59,598	\$59,335	\$53,376	\$5,960
Broadloom REUSE	123,466	875,512	-752,046	\$12,347	\$87,551	-\$75,205
Broadloom Recycling Collected, Sold and Shipped	61,612,559	104,015,219	-42,402,660	\$1,232,251	\$2,080,304	-\$848,053
Adjustments	N/A	N/A	N/A	\$0	\$0	\$0
Total All CSEs	63,861,803	106,703,461	-42,841,658	\$1,432,554	\$2,333,179	-\$900,625
Processors						
Tile RECYCLED	599,326	540,198	59,128	\$59,933	\$54,020	\$5,913
Type 1 Standard	42,399,898	46,659,167	-4,259,269	\$4,239,990	\$4,665,917	-\$425,927
Total Type 1	42,999,224	47,199,365	-4,200,141	\$4,299,922	\$4,719,937	-\$420,014
Type 2 Filler/Other	0	0	0	\$6,429	\$0	\$6,429
PC4 (Calcium Carbonate)	14,076,731	19,931,221	-5,854,490	\$2,393,044	\$3,388,308	-\$995,263
Total Type 2	14,076,731	19,931,221	-5,854,490	\$2,399,473	\$3,388,308	-\$988,834
Highest Recyclability: Nylon (6 & 6,6)	15,900,714	8,122,834	7,777,880	\$795,036	\$406,142	\$388,894
Adjustments*	N/A	N/A	N/A	\$0	\$0	\$0
Total All Processor	57,075,955	75,253,420	-18,177,465	\$7,494,431	\$8,514,386	-\$1,019,954
Manufacturers						
Non-Nylon Payouts	19,095,006	21,488,652	-2,393,646	\$4,778,151	\$5,355,973	-\$577,822
Nylon 6 Payouts	6,983,509	8,122,835	-1,139,326	\$698,351	\$812,284	-\$113,933
Nylon 6,6 Payouts	1,537,138	0	1,537,138	\$153,714	\$0	\$153,714
Adjustments	N/A	N/A	N/A	\$0	\$0	\$0
Total All Manufacturers	26,078,515	29,611,487	-3,532,972	\$5,630,215	\$6,168,256	-\$538,041
Subsidy Payouts						
Total All Subsidy Payouts	147,016,273	211,568,368	-64,552,095	\$14,557,201	\$17,015,821	-\$2,458,620

*Non-specified budgeted subsidy amounts.

7.6 Program Administration Costs

CCR Section 18944(a)(7)(F). *Program administration (% of total program cost, including annual administrative fee for service payments to the department).*

Total program cost includes three primary elements: subsidies (60.8%), program expenses (30.2%), and administration expenses (9.0%), as shown in Table 7-2. Subsidies are the combined expenses for subsidies to Collector/Sorters, processors, and manufacturers. Program expenses include education and outreach (E&O), collection, grants, and technical assistance.

Administrative expenses include fees to CalRecycle (2.1%), CARE administrative costs (0.1%), direct expenses (3.4%), direct support (1.2%), and legal and accounting services (2.2%). Administrative expenses include apportioned CARE Executive Director, Finance Director and Administrative Support staff, California Program Director, two California Senior Associates, California Grants Manager, California Market/Product Development Manager, California Program Coordinator. Legal and accounting services include assessment remittance reporting and fund management, subsidy reporting and payouts, Agreed Upon Procedures (AUP) reviews, legal oversight, financial audits, grant administration, and any related activities which may include annual report data generation, special analyses of data, surveys, etc.

Table 7-2. Total Program Expenses in 2019

Program Expense (in thousands of dollars)	Q1	Q2	Q3	Q4	2019 Total	% of Total Expenses	Budgeted Exp.	Delta Budget vs Actual
Subsidy Payouts (accrual)	\$2,917	\$3,716	\$4,160	\$3,764	\$14,557	60.8%	\$18,055	-\$3,498
Advisory Committee (P)	\$4	\$1	\$7	\$0	\$13	0.1%	\$45	-\$32
Education and Outreach (P)	\$376	\$196	\$298	\$259	\$1,128	4.7%	\$1,300	-\$172
Collections Program (P)	\$179	\$227	\$302	\$419	\$1,127	4.7%	\$1,840	-\$713
Grants (P)	\$1,182	\$98	\$747	\$1,839	\$3,866	16.1%	\$5,000	-\$1,134
Technical Assistance (P)	\$314	\$157	\$431	\$203	\$1,105	4.6%	\$1,440	-\$335
Subtotal Program Expenses (P)	\$2,055	\$678	\$1,785	\$2,721	\$7,239	30.2%	\$9,625	-\$2,386
CalRecycle Fees (A)	\$95	\$95	\$108	\$196	\$494	2.1%	\$1,125	-\$631
CARE Office Admin. Costs (A)	\$7	\$6	\$7	\$7	\$26	0.1%	\$148	-\$122
Direct Expenses – CARE (A)	\$172	\$197	\$195	\$262	\$826	3.4%	\$938	-\$112
Direct Support – CARE (A)	\$90	\$76	\$66	\$56	\$288	1.2%	\$869	-\$581
Legal and Accounting (A) [1]	\$212	\$43	\$143	\$131	\$529	2.2%	\$421	\$109
Bad Debt (A)	\$0	\$0	\$0	\$0	\$0	0.0%	\$0	\$0
Subtotal Admin Expenses (A)	\$575	\$418	\$519	\$651	\$2,164	9.0%	\$3,501	-\$1,337
Subtotal Pgm. and Admin. Exp.	\$2,630	\$1,096	\$2,305	\$3,372	\$9,403	39.2%	\$13,126	-\$3,723
TOTAL Expenses	\$5,547	\$4,812	\$6,465	\$7,136	\$23,960	100.0%	\$31,181	-\$7,221

Table Notes: This table shows program expenses (exp.) in thousands of dollars, including subsidy payouts, Program expenses (Pgm. or P), and administrative (Admin. or A) expenses. [1] Accounting cost = \$299,940, Legal = \$229,241.

Beaulieu Group, LLC (a Dalton-based carpet manufacturer) filed for bankruptcy in mid-July 2017. The Q2 reporting period had not yet closed, so as a result, Beaulieu did not pay their Q2 2017 assessment to CARE. In November 2017 Engineered Floors (EF) purchased the assets of Beaulieu Group. By agreement Beaulieu Trustee and CARE, the Bankruptcy Court issued an order allowing CARE to file a claim for the unpaid Q2 assessments, and CARE was able to recover 5/6 of the Q3 assessment fees that were incurred after Beaulieu filed bankruptcy along with Q4 assessment funds up to the date of the EF asset acquisition as administrative expenses. Subsequent to the EF acquisition, all assessments due on relevant sales are now paid by EF.

CARE remains an unsecured creditor for the Q2 and 1/6 of the Q3 assessment payments, which were incurred prior to Beaulieu filing bankruptcy. Any recovery of the pre-petition funds will be determined by the Bankruptcy Plan of Liquidation, which has been approved by the Court. The Plan of Liquidation proposed by Beaulieu in early 2018 provided that CARE was expected to receive approximately 8% of assessment funds due for its pre-petition claim. As a result, CARE voted against the Plan of Liquidation, which was subsequently approved by the creditors. In an effort to recover more funds, the Bankruptcy Trustee has filed suit against several members of the Board of Directors and Officers of Beaulieu Group for breach of fiduciary duty and improper distributions of funds prior to the bankruptcy filing. The Trustee has also filed claims against affiliates of Beaulieu for fraudulent transfers of funds and claims against several of Beaulieu's creditors for improper preference payments prior to Beaulieu's filing bankruptcy.

The Trustee also filed a claim against CARE to recovery (claw-back) the Q1 funds paid by Beaulieu in April 2017 as an inappropriate transfer within 90 days of bankruptcy filing. At the advice of CARE's local law firm, CARE took action to fight this claim by hiring a law firm in Atlanta who specializes in such cases. As of the end of 2019 the case is still pending in the US Bankruptcy Court for the Northern District of Georgia, and it will likely be 2020 at the earliest before a resolution is reached.

CARE informed CalRecycle's Enforcement Branch of these developments in a timely manner and suggested CalRecycle consider filing a claim as a state agency to aid in the potential recovery of the pre-petition unpaid assessment funds. As the case evolves CARE keeps CalRecycle informed.

Special Update: On March 20, 2020 CARE was informed that the complaint to claw-back was dismissed. CARE now considers this issue closed.

7.7 Governance Costs

CCR Section 18944(a)(7)(G). Governance (program oversight) (% of total program cost)

Program governance is provided by CalRecycle. In 2019, the Program paid \$493,966 to CalRecycle for their role in providing governance support and oversight on behalf of the state of California, equivalent to 2.1% of total 2019 Program expenditures. 2019 represents a 27.9% increase from the \$386,320 paid to CalRecycle in 2018 (2.1% of program expenses).

7.8 Total Cost to Local Government

CCR Section 18944(a)(7)(H). Total cost to local government (if applicable)

The Program does not currently track the costs of managing discarded carpet incurred by local governments, and it does not require any direct contribution by local governments. However, some local governments may support Program efforts, in line with their local waste diversion goals. Local governments participating in CARE's public drop-off site program may see financial benefits through offset costs of trailer and bin storage fees, transportation fees, and tip fees charged by receiving CSEs and Tier 1 processors incurred by the Program.

Local governments/disposal sites may continue to charge tip fees for carpet recycled through the drop-off site program, although sites are encouraged to offer a reduced tip fee for source-separated carpet prepared for recycling. Landfill air volume savings from carpet and pad, unquantified, is an additional benefit of the Program. The Program does not provide funds to offset labor costs that may be incurred as part of participation in the drop-off site program; however, it is presumed that tip fees charged by the sites receiving carpet adequately cover related handling costs.

7.9 Summary of Expenses

CCR Section 18944(a)(7)(I). *Amount of the assessment, aggregate assessment funds collected, how spent and amounts of each major expenditure.*

- a. *Funds, if spent on CAAF, must be supported with documentation reporting on economic and environmental impacts and that incentives shall expire, if they no longer serve a benefit.*
- b. *A carpet stewardship organization shall not expend funds from the assessment for engineered municipal solid waste conversion, as defined in Public Resources Code Section 40131.2, the use of cement kilns to burn carpet, or transformation, as defined in Public Resources Code Section 40201.*

Table 7-3. Summary of Program Income and Expenses by Category

Summary of Expenses	Amount/Description
Amount of Assessment	\$0.35 per square yard of carpet sold in California in 2019
Total Assessment Remittances	\$28.2 million
Total Interest Income	\$0.1 million
End-of-Life (EOL) Base Incentive Payout	\$5.1 million
PC4	\$2.4 million
Type 2 Filler/Other	\$0.006 million
EOL Bonus Subsidy Payout (Type 1)	\$0.052 million
EOL Tier 2 Subsidy Payout (base and growth incentives)	\$5.6 million
CSE Incentive Payout	\$1.4 million
EOL Gross Collection Payout (Rural County Program Storage/Transportation)	\$1.1 million
Marketing, Education, Outreach	\$1.1 million
Grant Program	\$3.9 million
Program Administration	\$1.7 million
Technical Assistance	\$1.1 million
Program Governance (CalRecycle Fees)	\$0.5 million
Total Program Cost	\$24.0 million
Cost per Pound of Gross Collection	\$0.29 per pound
Cost per Capita	\$0.60 per person

To provide clarification on Table 7-3, the Marketing, Education, Outreach category includes both Education & Outreach and Advisory Committee Expenses. Program Administration includes CARE Administrative Office Expenses, Accounting/Legal Expenses, Direct Expenses (Salaries & Benefits), & Direct Support. Technical Assistance expenses includes Technical Assistance, Modeling Consultant, PET Project, Testing Fees, Reporting Database & Studies.

The Program prioritizes subsidy expenditures which incentivize CSEs, Tier 1 processors, and Tier 2 manufacturers based on actual pounds of PCC material managed, shipped, and sold/donated. In this way, payouts are linked to direct market

results increasing accountability and tying Program investments to market-based solutions. In 2019, the Program again increased expenditures in other strategy areas including grants, collections, education/communications, and administration to further support Program goals. Please refer to Figure 7-2 and Figure 7-3 in Section 7.4 for additional information on Program expenses.

7.9.1 Economic and Environmental Impacts of CAAF and Kiln

In 2019, CAAF accounted for 0.001% of discards and 0.0% of reported diversion. Subsidies paid to CAAF totaled \$0.

Kiln utilization accounted for 0.006% of discards and 0% of diversion, at 17 thousand pounds which is up from zero pounds in 2018. Subsidies paid to Kiln totaled \$0, and 0% of total subsidy payouts. Kiln utilization as an alternative to WTE or landfill is considered a preferred disposition by CARE and is counted toward non-subsidized landfill diversion figures.

While CAAF/Kiln subsidies historically provided an economic incentive for processors to choose CAAF or Kiln disposition over landfill disposal for material components that are not able to be diverted via higher use recycling efforts, a decision was made in mid-2017 that effective January 1, 2018, all subsidies for CAAF and Kiln were discontinued.

7.10 Surplus Funding

CCR Section 18944(a)(7)(J). Surplus funding, if any, and how it will be applied to reduce program costs

The starting fund balance at the beginning of 2019 was \$15.4 million. During the calendar year, program revenues totaled \$28.3 million, comprised of \$28.2 million in assessment remittances paid by participating mills and interest income of \$104,861. Total expenditures in the form of subsidy payouts and other expenses totaled \$24.0 million during the term, or 85.1% of remittances. At the close of 2019, the Program's total ending fund balance was \$19.6 million. The assessment was set in anticipation of hitting a 24% recycling rate by January 1, 2020. The Reserve changes monthly with the level of payouts.

The newly approved Plan provides a reserve equal to a two-month average of total program expenses over the last quarter (last 3 months divided by 3, multiplied by 2).

7.11 Assessment Rate

CCR Section 18944(a)(7)(K). An evaluation of the assessment rate (% of total program cost).

Effective January 1, 2019, the assessment rate increased from \$0.25 to \$0.35 per square yard of carpet sold in California throughout the reporting period. The increased assessment was deemed necessary to fund new requirements per AB 1158, relating to expanded and enhanced subsidy increases corresponding to the targeted growth in recycled output pounds and other programmatic goals. The latest assessment increase represented a 40% increase in the per square yard assessment over the prior year and a 600% increase since the program started in July 2011 at \$0.05 per square yard. There was no additional assessment increase during 2019.

8 Outreach/Education

CCR Section 18944(a)(8). Outreach/Education. *List educational outreach activities in the stewardship plan. Provide a description of educational materials that were provided to retailers, consumers, carpet removers/installers, contractors, during the reporting period (provide electronic samples). Identify the method used to determine the effectiveness of educational and outreach surveys (e.g., surveys, hits on specific web pages, number of participants at events, etc.). Education and outreach materials may include, but are not limited to, signage, written materials, advertising or other promotional materials pursuant to Section 42972(a)(5) and Links to website(s) created and maintained by the manufacturer or stewardship organization.*

The California Stewardship Program carries out education and outreach efforts throughout the year to multiple audiences. Activities in 2019 were conducted by the entire Program team, including CARE's Executive Director Robert Peoples, California Program Director Jacy Bolden, Senior Associates Lisa Mekis and Jared Zitron, Product & Market Development Manager Rob Thiess, Grants Manager Abbie Beane and the environmental marketing agency Gigantic Idea Studio (GIS). Market development efforts are addressed in Chapter 6, *Market Development* and Collections related outreach is addressed in Chapter 4, *Program Outline: Collection & Recycling Sites*. Electronic samples of educational materials are presented in Appendix 10.7.

Outreach and education goals are intended to support and promote the overall Program goals. These activities include both planned and timed outreach as well as opportunistic outreach as information and events require. Outreach and educational activities include the following:

- Increase collection by informing retailers and installers about recycling opportunities, in particular CARE drop-off sites.
- Increase recycled output through stimulation of market awareness and demand for recycled products and by promoting the incorporation of PCC in appropriate products.
- Increase diversion by highlighting carpet reuse and recyclability opportunities.
- Support efforts to identify new opportunities for CARE Public Drop-off Sites or making such opportunities known to the private collection network.
- Raise awareness of CARE's activities in support of the carpet recycling ecosystem.

Audiences included retailers, installers, drop-off sites, local government, current and potential grantees, Collector/Sorters, processors, manufacturers, events and consumers.

A major shift occurred in 2019: whereas previously the concern was balancing supply efforts with securing reliable end-market outlets for processed carpet materials collected. As a result of strategic grant opportunities and other market development efforts, by the end of 2019 program emphasis transitioned to demand beginning to outstrip supply and needing to collect more carpet to meet demand from processors and manufacturers, especially for PET. This shift was reflected in even more energetic efforts by collectors soliciting carpet supplier accounts and to provide more opportunities for recycling, such as the emphasis on medium volume container services in the Sacramento area.

Activities and messages in 2019 included:

- **Retailers:** Drop-off site opportunities, encouragement of recycling pick-up service uptake, consumer education on carpet recycling and recyclability; PCC recycled-content products; installer outreach.
- **Installers/Contractors:** Raise awareness of carpet's recyclability and availability of drop-off sites and installers' role in recycling. Support CARE's outreach to union installers.
- **Drop-off sites:** Provision of collateral, signage, and media templates to increase customer awareness of carpet recycling at drop-off sites, along with marketing assistance aimed at making accurate information easily available to potential site customers (retailers, installers, contractors). On a quarterly basis individualized outreach is conducted to every drop-off site, and an interactive educational webinar is produced and presented to all drop-off sites.
- **Local government:** Promote awareness of drop-off site opportunities and engagement to create additional sites; awareness of carpet recyclability; provision of consumer-facing information; availability of recycled carpet content products and grants. Provision of CARE collateral to building departments to reach contractors. Visits to building departments, individualized meetings, and presentations offered to local government representatives and working groups.
- **Current and potential grantees:** information on available grants and subsidies; grant case studies.
- **Current and potential manufacturers:** distribution of collateral (California Carpet-Derived product catalog) to potential customers, promotion of inclusion of PC4 by manufacturers looking for new feedstock.

- **Potential PCC product purchasers:** Continuing efforts to reach the green building industry both for purchase of PCC products that may contribute to LEED points and other certifications and to educate that tear out carpet is recyclable when properly prepared.
- **All audiences:** Updates on the Program, including grant opportunities, market development activities, recycling updates, CARE progress and challenges.

The Program outreach team's in-person efforts in 2019 included the following, described in more detail in the remainder of this chapter:

- 21 Drop-off site visits
- 655 in-person visits to retailers (new drop-off sites and services, revisits, regular outreach)
- 25 calls to retailers (compliance, revisits, regular outreach)
- 63 Installer events (including supply house and retailer tablings)
- 1,864 installers and 152 contractors total reached in 2019, 196 commitments to encourage/support recycling.
- 25 Local Government visits
- 6 Home Show tablings, over 5,000 residents/contractors reached

8.1 Education and Outreach Strategies

The following strategies were employed by the Program in 2019:

- Ongoing retailer contacts to raise awareness of the Program's activities and new drop-off sites and to explain how used carpet is being transformed into useful products. Reaching out to retailers allows for contact with additional audiences, such as carpet installers and the public. Ongoing contact is needed to keep data on each retailer current (contact people, whether currently recycling, interest in container service, installer relations, etc.) and ensuring new retailers are charging assessment.
- Ongoing drop-off site outreach and education directed toward operational, administrative, and local government participants. Quarterly outreach includes a review of the pounds collected, the weights and cleanliness of loads, technical assistance, and individualized program support along with sharing experiences.
- Ongoing contact with local government representatives to raise awareness of carpet recycling and the Program's activities and develop collaborative

partnerships to increase diversion in their area in addition to outlining existing carpet recycling opportunities in their area.

- Provided marketing assistance to manufacturers launching products containing California-derived post-consumer carpet material.
- Supported market development efforts around recycled carpet content products with a revised Recycled Carpet-Derived Products catalog.
- Researched barriers and solutions to increased collection and recycling with appropriate stakeholders: ongoing retailer data collection; installer tabling survey; consumer survey on impact of assessment.
- Concentrated promotional efforts in specific areas to increase carpet recycling: combining multiple ads with in-person visits to move the needle on carpet collection.
- Ongoing communication efforts to inform about the Program's progress and challenges.

8.2 Drop-off Site Outreach

In addition to on-going drop-off site support CARE conducts a Quarterly Engagement with all CARE public drop-off sites. The Quarterly Engagement involves: completion of a quarterly report by all drop-off sites; a phone meeting between CARE staff and a representative from each drop-off site to review container weights and swaps, operational challenges, and promotional materials; and presentation of a quarterly educational drop-off site webinar. In 2019, there 4 webinars with a total of 224 people in attendance.

Quarterly Engagement Webinar Topics:

- Program updates and data review: current news and collection data by quarter.
- Technical assistance: container loading tips, container load weights, signage placements, carpet handling in weather (rain/snow).
- Micro-grants and Infrastructure grants: outlining grant opportunities and grant funded improvement examples.
- Open discussion: site operational success and challenges, best practices, feedback on how the Program is working.

Marketing activities for drop-off sites included updates to and distribution of the following pieces: (see Appendix 10.10 for sample materials): 57 English signs, 34 Spanish signs, bilingual signs, 4,950 site- or county-customized flyers and 2,860 brochures were distributed by request to CARE drop-off sites in 2019.

8.3 Retailer Outreach

Almost all California-based retailers have been contacted and/or visited at least once since the start of in-person outreach in 2015. Seventy retailers from the original list of about 2,000 are now marked “out of business.” 2019 activities included:

- Initial retailer visits to new retailers or those who had not previously been contacted. The outreach team tries to confirm as much detail about current practices as possible—where does tear-out carpet go, who takes it, is it recycled, name of hauler, etc.—to record in the retailer database. New retailer visits include confirmation that the retailer understands and is in compliance with the assessment. Specific collateral outlining invoice requirements is provided.
- Informing retailers of new CARE drop-off sites in their area and working to promote recycling services (650 in-person retailer visits conducted). Outreach team reported particular success when showing post-consumer carpet-derived products (samples and catalog), which provided tangible confirmation that carpet is recycled into a growing number of useful products. From a 2019 outreach visit report: *“He [store owner] was shocked and pleasantly surprised to learn of the PCC products and increased number of drop-off sites. He commented, “Thank you for coming in, because sometimes you just get all these ideas in your head.”*
- Providing collateral and encouraging uptake of recycling service. A revised retailer brochure included expanded information on products manufactured with post-consumer carpet materials along with description of the recycling process.
- Maintaining a current and accurate database of all retailers in California to enhance effective and timely communications, while increasing the data points gathered. Data points relating to PCC handling, recycling interest, available space for recycling provide both team referral opportunities and program design feedback.

Print materials also were distributed at events including California Resource Recovery Association (CRRA) annual conference in August 2019, where CARE was an exhibitor and presenter. See Conferences, below.

8.4 Installer Outreach

It is critical to build visibility with flooring installers, who are often the last people to touch tear-out carpet. Installers are most often responsible for taking the carpet to a drop-off site; their cooperation is essential to increase the amount of carpet recycled. Installer outreach activities included tabling, video, union trainings, and union tabling, as described below.

Tabling – Over 1,300 installers were reached in person at 63 tabling events, held at installer supply houses and some retailers. Installers were greeted, answered brief survey questions and were given information on drop-off sites in their area along with carpet preparation tips. As in 2018, about 80% of installers questioned in 2019 say the carpet they tear out is not recycled, though only 46% of respondents confirm that they take carpet to landfill. See Table 8-1 for details on installer responses.

Table 8-1. Supply House Tabling Questionnaire with Responses, 2019

Question	Responses
Do you currently recycle your tear-out carpet?	No = 1,119 Yes = 271
Where do you take your tear-out carpet?	Landfill = 572 Retailer Container = 371 CARE Drop-off Site = 123 Other = 78
Do you know if it is recycled there?	No, it is not = 1,025 Yes, it is = 254 I don't know = 112
What would encourage you to recycle carpet?	Being less expensive = 639 Knowing about it = 303 Being close to job location = 231 Being close to my workplace = 122 Being close to my home = 59 Other = 24
Did you know that you might be able to save money by recycling carpet?	No = 1,181 Yes = 197
Are you a Contractor?	No = 522 Yes = 119
What best describes your work role – please select all that apply.	General Contractor = 102 Work with Property Managers = 15 Work for a Homeowners Association = 2 Other = 23
Do you encourage carpet recycling with your installers or crew?	No = 134 Yes = 62

In addition to the events listed above, 470 additional installers and contractors were reached, including three special events by invitation at Floor & Decor Retail locations and as part of a rural collection event in Los Banos (Merced County).

Videos – English and Spanish language videos on the importance of recycling and on the preparation of carpet for recycling play a part in raising awareness of the installers' role in carpet recycling. In 2019, the two versions garnered over 88,000 views.

Union trainings – In addition to the success of installer tablings and videos CARE has begun a new effort to reach more installers through a partnership with California's Floor Covering Union. In the fall of 2019 CARE staff worked with the International Union of Painters and Allied Trades (IUPAT) District Council 16 representatives to create training materials for union installers throughout California. Interactive trainings were given by CARE staff to four classes of apprentice installers, reaching a total of 64 early-career installers. CARE intends to grow this partnership and effort in 2020 and beyond – see Section 5.16.



Union training class from District Council 16, San Leandro.

Union tabling – CARE participated in District Council 16's first Annual Floor Covering Forum. The event was held at the Union Training Center in San Leandro Reaching over 50 floor covering professionals and apprentices. Feedback from the event allowed CARE to learn more about materials handling issues/concern and reuse outlets used which helped inform program opportunities with local CSEs, while also providing referrals to nearby CSEs for PCC collection..

8.5 Consumer Outreach

CARE used a mass media piece along with a selection of in-person events to reach consumers with basic messaging that carpet is recyclable. An important partnership with three other stewardship organizations helped to demonstrate that these “difficult” items can be recycled.

8.5.1 Media Insert

In April 2019 CARE joined with other stewardship groups—Call2Recycle, PaintCare and ByeByeMattress—for a four-page newspaper insert about difficult-to-recycle items: carpet, batteries, paint and mattresses. The insert was created and placed by Sacramento-based SN&R. The company managed placement of the insert in 25 newspapers (English and Spanish) around the state. Results included the following:

- 2.44 million inserts printed and distributed (mostly to subscribers)
- 25 media outlets (12 English, 13 Spanish) in the Los Angeles, San Francisco Bay Area, San Diego, Sacramento, and Fresno regions
- 30-second video PSA created; added to CARE YouTube channel
- Additional copies of the insert were distributed during other in-person outreach opportunities.
- The insert’s impact on CARE’s California website traffic was brief but quite dramatic. For the period April 15-30, the number of California-based visits to the website increased by 81% (579 to 1,046) and California-based visitors (individuals) increased 87% (414 to 774) in the same period.



Educational media insert for recycling carpet, mattresses, paint, and batteries.

CARE was pleased with the result of this more integrated message on hard-to-recycle materials and hopes to continue the partnership with the other stewardship organizations.

8.5.2 Home & Garden Show Outreach

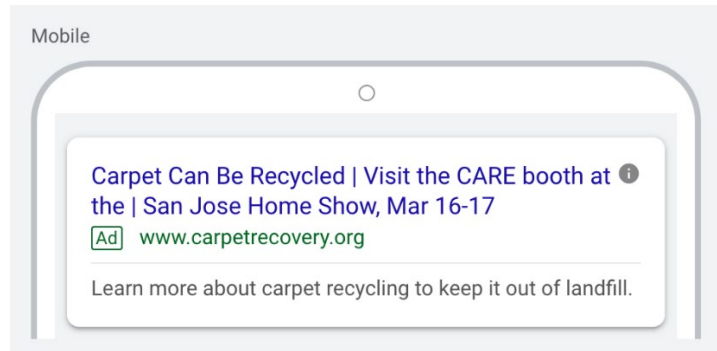
Outreach is most effective when it reaches the target audience when they are the most receptive. In 2019 CARE's outreach team members tabled at six home and garden shows (Auburn, Fresno, Riverside, two in Sacramento and San Jose) chosen either because they aligned with targeted regional approach areas or to highlight a nearby drop-off site. Attendance and the number of visitor interactions varied significantly, but all told CARE booth staff interacted with over 5,000 people. The message that carpet can be recycled was new to most attendees and was received with great interest.

Attendees included homeowners, but also property managers, contractors and even local government representatives. Interest by booth visitors in the samples of products made from recycled carpet was high, with quotes such as, "I was just going to throw the carpet out, but, if people are able to make something out of it, I'll take it to one of the drop-off sites."

Many contractors and other building professionals took information on local CARE drop-off sites. CARE's presence at several of the shows was supported with digital search ads. The most successful ad ran in San Jose, garnering over 20,000 impressions and 42 clicks to the CARE website for less than \$175. The spring Sacramento show was supported with the following more general "carpet can be recycled" ad in the *Sacramento Bee*.



Sacramento area carpet recycling brochure.



Paid digital ad for advance promotion of CARE's attendance at San Jose Home Show.

8.5.3 Consumer Survey

At CARE's request in October 2019 GIS conducted a brief survey to better understand consumers' attitudes toward carpet purchase and the assessment. An online survey taken by some 300 California residents (responses purchased via SurveyMonkey) on their recent or soon-to-be flooring purchase plans and the factors that influence those plans.

Observations included:

- Comfort was an aspect of flooring that was more important to carpet buyers than to other flooring buyers. Appearance and durability were important to all buyers.

- 38% of carpet/carpet tile buyers were MORE likely to buy carpet because of the 35-cent assessment, versus 13% of non-carpet buyers. This indicates that “green” messaging may be applicable to a segment of the carpet-buying market.

8.6 Regional Approach

In 2017 the CARE team initiated a Regional Approach Pilot to test the effectiveness of a multi-touch strategy to educate and learn from various stakeholder groups within a geographic area, with a goal of improving collection, recycling and awareness of carpet recycling opportunities.

In 2018 and 2019 those pilot efforts evolved into a targeted and strategic Regional Approach continuing deeper in Sacramento and Los Angeles Counties, while areas of San Diego County were added.

Greater Sacramento Area: focused in Sacramento County and portions of surrounding counties. Including Yolo, Solano, San Joaquin, El Dorado, and Placer Counties.

Los Angeles area: approximately 30 miles surrounding American Reclamation (CARE drop-off site) and areas serviced by American Reclamation, concentrated in the communities of Burbank, Glendale, and portions of Los Angeles.

San Diego County: pilot areas included:

- The North County region of San Diego County including San Marcos, Vista, Escondido, Solana Beach, Carlsbad, Encinitas and Oceanside to coincide with a new San Marcos drop-off site.
- The East County region including Lemon Grove, La Mesa, Poway, El Cajon, Lakeside, Santee and surrounding areas to coincide with the drop-off sites in Lemon Grove and Chula Vista.

8.6.1 Regional Approach Objectives

- Raise awareness that carpet is recyclable.
- Increase carpet recycling opportunities, infrastructure, and on-site services.
- Increase amount of carpet taken to drop-off sites instead of to landfill.
- Encourage adoption of container service (if available).
- Test effectiveness of a concentrated, multi-touch outreach effort in a particular area served by a drop-off site(s).

8.6.2 Regional Approach

Strategies

- Expand carpet recycling opportunities, infrastructure, and services through increased number of drop-off sites, pick-up service, processors, and events.
- Enlist Local Government support.
- Visit all retailers in designated area; segment by currently vs. not recycling; encourage non-recyclers to use new drop-off sites and forward information for those desiring on-site collection services.
- Conduct installer tablings to raise awareness of carpet recycling practices and identify locations of local drop-off sites.
- When appropriate conduct a focused mass media campaign (billboards, ads, etc.) to raise awareness that carpet is recyclable and to utilize the growing recycling resources in their area.

Tactics included presentations to local government representatives, site visits to disposal and recovery facilities, recruitment of new potential drop-off sites, coordination with CSEs and local service providers, in-person visits to retailers, recycling consultations to assess potential suitability for recycling pick-up service or drop-off site promotion, custom collateral detailing local recycling service options and regional drop-off site locations, follow-up calls, search engine ads to promote local carpet drop-off sites with custom landing pages summarizing relevant information, installer surveys at supply houses, and providing basic “Buy Recycled” messages.

Greater Sacramento Area Results

In 2019 four waste facilities in the Greater Sacramento Area adopted CARE’s public Drop-off Site Program bringing the total number of drop-off sites in the area to 10. In addition, pick-up recycling service was adopted by four local haulers.

All 84 retailers in the Greater Sacramento Area received in-person visits. The in-person visits included recycling information and consultation along with a map of the local drop-off sites. In addition, retailers were offered a \$500 incentive payment if they started recycling pick-up service with one of the participating haulers. While uniquely offered during two distinct opportunity windows, and aggressively promoted via mailings, in-person visits, direct personal email and phone call follow up, the offer was very well received yet no one took up the offer.

Installers were contacted through three tablings at Supply Houses reaching 92 installers and 12 contractors from the area.

The general public was reached through tablings at three Home and Garden Shows reaching 531 people; three newspaper advertisements reaching 250,000 people; and two billboard advertisements lasting six weeks and representing 4.1 million impressions on members of the public. A special landing page to inform the public about carpet recycling options was created for the Sacramento Regional Approach. The page garnered 514 pageviews and accounted for 424 entrances to the CARE website, with a healthy average time on page of 2 minutes, 14 seconds.

The public drop-off sites in the Greater Sacramento Area collected 1,623,968 pounds of carpet in 2019. Which is approximately 16% of the total pounds collected at public drop-off sites in all of California.

Los Angeles Area Results

The outreach team continued retailer visits to the area around CARE drop-off site American Reclamation, as begun in 2017 44 retailers were visited. Retailers were particularly interested in the products made with recycled carpet material noting this was a selling point for some customers. Retailers were informed about American Reclamation and encouraged to use their recycling service. CARE created a sign for the facility to promote carpet recycling in view of passing traffic.

Despite a fire at the American Reclamation facility in winter of 2019, which curtailed further outreach until mid-Q1 2020, their facility realized a 4% increase in PCC recovery.



Carpet recycling banner on structure at recycling facility.

In 2019, four additional sites located in the cities of Industry, Pomona, Signal Hill and South Gate joined the CARE Drop-off Site program. Outreach and promotion efforts in support of all sites effectively supported a doubling of postconsumer carpet diversion of nearly 1.1 million pounds.

San Diego County

The outreach team completed visits to 67 retailers, including four newly discovered retailers. Four installer tabling events were held and a total of 70 installers and 10 contractors were reached. More than half of retailers visited expressed interest in a hauler service; names were passed to CARE staff for follow-up. One-third (51 of 146) of installers/contractors spoken with committed to using the CARE drop-off sites in the county.

8.7 Conferences

GreenerBuilder – CARE staff tabled at US Green Building Council’s (USGBC’s) one-day GreenerBuilder conference in San Francisco in August 2019 for the second year. CARE’s purpose was to gauge degree of interest and knowledge of carpet and PCC products among the green building industry. Conference attendees—architects, builders, facilities managers and others in the green space— were already very familiar with sustainability concepts and showed significant interest in the recycled-content products on display. Most did not know that carpet could be recycled and were anxious to learn about it.

Greenbuild Expo – CARE tabled at USGBC’s Greenbuild Expo in Atlanta in November. The booth was experienced high-level attendance and attendees showed greater interest and receptiveness to CARE’s messaging than at green building gatherings in past years. To drive booth traffic, CARE worked with the conference’s promotion company to run digital ads to encourage booth traffic and to create a video promotion of CARE to be advertised during the Conference, along with a post-Conference video interview featuring a CARE board member talking about recycled-content products.

California Resource Recovery Association – A session on carpet at the August 2019 CRRRA conference included a summary of the California program by California Program Director Jacy Bolden. In addition, CARE was an exhibitor at a highly trafficked booth where staff distributed collateral, answered questions, and showed a program update video at the CARE table.

8.8 General Outreach

In addition to audience-specific efforts detailed above, the Program continued general outreach efforts to stakeholders in 2019 including the following activities, described further below:

- Monthly E-news
- Blog posts

- Website updates
- Social media

8.8.1 Monthly E-news

The program sends a monthly e-newsletter to any stakeholder who opts-in to receiving. In 2019, the opt-in E-news list maintained over 2,200 recipients, with a strong average open rate of 31% and average click-through rate of 14%. Industry average email open rates for nonprofit organizations of varying sizes is around 20% so CARE's E-news performance is quite encouraging. Signup for CARE communications and E-news is promoted throughout the year via the website, meetings and conferences, and in other digital and print communications.

8.8.2 Blog Articles

The California Program published 20 blog posts on the CARE site in 2019, with topics ranging from grant case studies, program results and product developments. Blogs are promoted via the e-news and Twitter.

8.8.3 Website Updates

GIS maintains and regularly updates the California Program website, including the blog articles noted above. As shown in Table 8-2, website traffic for California-based visitors grew significantly in 2019, with 21% more visitors and 15% more visits over 2018. (Visits from the U.S. as a whole are up 7% over 2018.)

Table 8-2. California-based Traffic to CARE Website

Website Metrics	2019	2018	% change
California visitors	11,343	9,357	21%
California visits	16,312	14,138	15%
California page views	33,985	31,297	9%
Avg. visit duration (seconds)	2:03	2:21	-13%

8.8.4 Social Media

CARE has a Twitter account ([@CarpetRecycle](https://twitter.com/CarpetRecycle)) that the California program uses to publicize activities, events and news. The account had 421 followers as of the end of 2019, an increase of 21% over 2018. CARE tweeted three to five times a week in 2019, with approximately 140 tweets garnering 75,000 impressions.

In addition to Twitter, CARE maintains a [YouTube channel](#) and a [SlideShare](#) account to reach users who may be searching for pertinent material but not be aware of CARE. The YouTube channel hosts 9 videos, has 284 subscribers, and garnered 89,000 video views in 2019. The SlideShare account hosts 14 presentations from past public presentations and webinars.

8.8.5 Stakeholder Database

Gigantic Idea Studio maintains a robust database of Program stakeholders to track interactions and progress. In addition to general contact information, the database tracks retailers' recycling status, collateral requested and sent to retailers, installers and drop-off sites, reports of in-person visits, and more. As of the end of 2019 the database had records for over 6,000 organizations, agencies and businesses in California.

8.9 Next Steps

The Program's marketing, education and outreach effort will continue to focus on the dynamic changing needs of the Program in order to provide timely and effective support to all stakeholders. Particular areas in which the Program Team will focus include:

- **Collection growth** – Growing carpet collection will be essential to success in 2020. The Program Team will target the outreach, education, and promotional strategies to consistently message that properly prepared carpet can (and must) be recycled at locations throughout the state.
- **Local government** – Growing and nurturing partnerships through outreach to local government representatives and offering presentations to regional action groups.
- **Public drop-off sites** – Ongoing education and technical assistance. Sharing best practices as the Program evolves and with a growing number of participants.
- **Retailer outreach** – As more drop-off sites and container services become available, outreach will be essential to encourage uptake of these opportunities.
- **Installer outreach** – The Plan includes ambitious goals for communicating with installers in person and via video to persuade them to recycle carpet. CARE will provide video and other collateral support and strategy as needed and develop on-going partnership with the Floor Covering Union.
- **Market development** – As more PCC products come online there will be opportunities for increased and targeted marketing/promotion of the products, along with marketing assistance for the manufacturers. Many of the new companies are not yet adept at marketing these products, which are often

complicated to “sell” to the public. Marketing assistance for reaching the 26% recycled output goal will be a paramount focus of marketing/outreach in 2019.

- **Consumer outreach** – CARE will continue targeted outreach to consumers to inform about basic messaging that carpet is recyclable, and to encourage asking installers/retailers about recycling when purchasing flooring.

9 Audits

CCR Section 18944(a)(9). Audits. *The annual report shall include an independent financial audit funded from the carpet stewardship assessment. The audit shall be conducted in accordance with auditing standards generally accepted in the United States of America, and standards set forth in Government Auditing Standards issued by the Comptroller General of the United States. The audit report shall also include a separate state compliance report on the carpet program requirements as directed by the department.*

The financial statements of CARE and the California Carpet Stewardship Program for the year ending December 31, 2019, were audited by independent Certified Public Accounting firm Brooks, McGinnis & Company, LLC, based in Atlanta, Georgia. CARE National Audits, which are not paid for with California Recycling Assessment monies, are available to CalRecycle Staff upon request.

The audit statements are presented in Appendix 10.13, beginning on page 327.

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10.1 Summary of Performance Goals, Annual Targets, and Progress to Date

Performance Goal #1: Increase the recyclability of carpet.

Primary Performance Goal: Increase Yield to 60% by December 31, 2022.

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Year	Goal	Yield – Actual	Annual Result
Baseline	N/A	28%	(performance goal not yet set)
2018	40%	53%	On Track, Met, and Exceeded
2019	45%	71%	On Track, Met, and Exceeded
2020	50%	<i>(future)</i>	<i>To be determined</i>
2021	55%	<i>(future)</i>	<i>To be determined</i>
2022	60%	<i>(future)</i>	<i>To be determined</i>

Performance Goal #2: Expand and incentivize markets for products made from post-consumer carpet (PCC).

Primary Performance Goal: Increase the number of recycled-carpet-content products in the marketplace by 40% by December 31, 2020, over the 2016 baseline. Establish guidelines to include minimum thresholds for recycled carpet content by December 31, 2020.

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Year	Goals	Recycled Product & Vendors – Actual	Annual Result
2018	27 products, 11 vendors, 4 in CA	At least 27 products, 12 vendors, 5 in CA	On Track, Met, and Exceeded
2019	30 products, 12 vendors, 5 in CA	At least 77 products, 25 vendors, 10 in CA	On Track, Met, and Exceeded
2020	35 products, 13 vendors, 6 in CA	<i>(future)</i>	<i>To be determined</i>
2021	37 products, 14 vendors, 7 in CA	<i>(future)</i>	<i>To be determined</i>
2022	40 products, 14 vendors, 7 in CA	<i>(future)</i>	<i>To be determined</i>

Performance Goal #3: Increase the reuse of post-consumer carpet.

Primary Performance Goal: Increase reuse quantities, as measured by weight, by 100% by December 31, 2022 compared to 2016.

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Year	Goal (million pounds)	Reuse – Actual (million pounds)	Annual Result
2018	1.0	0.734	On Track
2019	1.2	0.717	On Track
2020	1.5	<i>(future)</i>	<i>To be determined</i>
2021	1.8	<i>(future)</i>	<i>To be determined</i>
2022	2.0	<i>(future)</i>	<i>To be determined</i>

Performance Goal #4: Increase the weight of post-consumer carpet that is recycled.

Primary Performance Goal: Increase the annual weight of Recycled Output to 84 million pounds consistent with a 27% recycling rate by December 31, 2022.

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Year	Goal (million pounds)	Recycled Output – Actual (million pounds)	Annual Result	Notes
2018	52	49	On Track	Catching up, delayed grant releases
2019	69	58	On Track	Catching up, prior delayed grant releases. Wildfires, Permit delays.
2020	81	(future)	To be determined	(future)
2021	83	(future)	To be determined	(future)
2022	84	(future)	To be determined	(future)

Performance Goal #5: Reduce the disposal of post-consumer carpet.

Primary Performance Goal: Reduce the disposal of post-consumer carpet (PCC) by 28% by December 31, 2022.

Plan Page: 43, Table 5 on page 44

Metric	Units	Baseline 2011/2012	2017 Actual	2017 <i>Revised</i>	2018 Budget	2018 Actual	2019 Forecast	2019 Actual	2020 Forecast
Sales	Million square yards	98.4	90.4	90.4	90.0	86.0	88.0	80.5	87.0
Discards	Million pounds	356.8	345.2	337.7	336.4	321.6	328.9	303.8	325.2
Recycling Rate	Annual average	8%	14%	14%	17%	15%	24%	19%	26%
Recycled Output (RO)	Million pounds	27.6	47.0	47.0	51.7	49.0	69.0	58.0	81.2
Disposal	Million pounds	329.2	298.2	290.7	284.7	272.6	259.9	245.8	244.0
Reduction in Disposal	Million pounds	Baseline	-31.0	-38.5	-44.5	-25.6	-69.3	-38.9	-85.2
Disposal Rate	%	92.3%	86.3%	86.3%	83.3%	84.8%	75.7%	80.9%	74.2%
Reduction	%	-7.7%	-13.7%	-13.7%	-17.0%	-15.2%	-24.3%	-19.1%	-25.0%
Performance Goal & Status	%					-13% Achieved/ Exceeded		-20% On Track	

Table Note: 2017 Actual numbers were corrected as shown in the "2017 Revised" column; revisions noted in bold italics.

Performance Goal #6: Provide for increasing and reasonably convenient collection opportunities in each county.

Primary Performance Goal: Establish one site per 500,000 persons for any county with a population over 500,000 by the end of 2021, including a minimum of one site per county with a population over 50,000 by July 1, 2019.

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Year	Goal	Convenient Collection – Actual	Annual Result
2018	Minimum 1 site/county	53 public drop-off sites in 47 of California's 58 counties , 156 private collection sites CARE Drop-off Sites = 1 site per 738,251 people CARE DoS + Private Sites = 1 site per 187,212 people	On Track
2019	Minimum 1 site/county	73 public drop-off sites in 50 of California's 58 counties , 204 private collection sites CARE Drop-off Sites = 1 site per 541,928 people CARE DoS + Private Sites = 1 site per 142,819 people	On Track
2020	Minimum 1 site/county	<i>(future)</i>	<i>To be determined</i>
2021	1 site/500,000; 33% increase in private sites (267 sites)	<i>(future)</i>	<i>To be determined</i>
2022	(not set)	<i>(future)</i>	<i>To be determined</i>

Performance Goal #7: Increase processor capacity, including processor capacity in California.

Primary Performance Goal: Complete capacity study/survey by mid-year 2019; initiate implementation of recommended program adjustments by end of 2019 and set 2022 goal based on study results.

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Year	Goal	Capacity – Actual (million pounds per year)	Annual Result
2018	N/A	444.6 Total 63 in CA	On Track
2019	Increase capacity	461.9 Total (4% increase) 89 in CA (41% increase)	On Track Conducted annual capacity survey
2020	<i>(not set)</i>	<i>(future)</i>	<i>To be determined</i>
2021	<i>(not set)</i>	<i>(future)</i>	<i>To be determined</i>
2022	<i>(not set)</i>	<i>(future)</i>	<i>To be determined</i>

Performance Goal #8: Achieve 24% recycling rate for PCC by January 1, 2020.

Primary Performance Goal: Achieve a 24% recycling rate for post-consumer carpet by January 1, 2020, and any other recycling rate established by the Department over the term of this Plan. Future goals will be set by CalRecycle per Public Resource Code Section 42972.2(b).

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Year	Goal	Recycling Rate – Actual	Annual Result	Notes
2018	17%	15%	On Track	Catching up from delayed grant releases
2019	24%	19%	On Track	Quarter 4 = 22.5%; Catching up on prior delayed grant release, failed power delivery by PG&E/wildfires, permit delays.
2020	26%	(future)	To be determined	N/A
2021	26%	(future)	To be determined	N/A
2022	27%	(future)	To be determined	N/A

10.2 Summary of Subsidy and Incentive Payouts

Table 10-1. Summary of Subsidy and Incentive Payouts

#	Subsidy/Incentives	Payout Rate	Description	Timeline/Date of Action	Addendum	Notice
CSEs						
1	CSE Reporting Incentive (CSE)	\$1,000/month	No change anticipated	Initiated 2014	N/A	Incentive; not subject to guaranteed timeline
2	Broadloom Recycling Collected, Sold, and Shipped	\$0.02/lb	For self-collected, sorted, sold, and shipped CA pounds.	California Program-approved under current Plan purview; retroactive to Q3 2015	3	Subject to adjustment, beginning Q4 2017
3	Reuse	\$0.10/lb	For self-collected and shipped/sold or donated carpet tile or broadloom for the purpose of reuse	Effective Q2 2015; clarified June 2015 as applicable to the reuse of both broadloom and carpet tile, and retroactive to Q2 2015	1, 3	Subject to adjustment, beginning Q4 2017
4	Tile Reuse or Recycling Collected, Sold, and Shipped (PILOT)	\$0.05/lb	For CA generated carpet tile collected, shipped and sold for recycle/reuse or donated for reuse.	Effective Q1 2018	N/A	Initiated as a 6-month pilot, effective January 1, 2018 and still in effect
Tier-1 Processors						
5	Tile Recycled	\$0.10/lb	For carpet tile recycled output	Effective Q2 2015	1	Subject to adjustment, beginning Q4 2017
6	Type 1 Recycled Output Payout	\$0.10/lb	Adjusted subsidy payout from \$0.06/lb to \$0.10/lb, tied to market indices; [Type 1 refers to recycled fiber output within ash content thresholds, currently less than 25% ash]	In Plan v.3.2.2 – March 2014; base payout rate adjustable, may be tied to market indicator using Models	3	\$0.06/lb subject to adjustment, beginning; Q4 2017; \$0.04/lb adjustable quarterly effective Jan. 2016.
7	Type 2 Recycled Output Payout	\$0.03/lb	Type 2 refers to recycled output with higher ash content thresholds, currently more than 25% ash.	In Plan v.3.2.2 – March 2014	N/A	Subject to adjustment, beginning Q4 2017
8	Type 2 PC4 (Calcium Carbonate) Payout	\$0.17/lb	Non-fiber recycled output containing predominately calcium carbonate for use as feedstock in secondary products; currently \$0.17/lb	Change 1, effective Q2 2015; change 2, in June 2015; change 3, effective Q3 2015; [For use as a raw material (recycled output feedstock) only]	1, 3	Subject to adjustment, beginning Q4 2017
9	Commercial Broadloom	\$0.02/lb	For CA generated commercial broadloom recycled output. NOTE: this incentive is currently suspended and not in force	Initially slated to go into effect implemented Effective Q3 2018, but implementation suspended due to operational concerns	N/A	Initiated beginning Q3 2018
10	Highest Recyclability	\$0.05/lb	For CA generated PCC fibers meeting the Highest Recyclability parameters defined by the HR Committee (Plan Table 6), and calculated through the Subsidy Justification Model. Beginning 1/1/19, N6 and N66 broadloom and carpet tile qualify for H.R. incentive.	Effective Q1 2019	N/A	Initiated Q1 2019
Tier-2 Manufacturers						
11	Tier-2 Manufacturer Non-Nylon Payout	\$0.25/lb	For Type 1 non-nylon recycled output used as a feedstock in the manufacture of secondary products; currently \$0.25/lb	Change 1, effective Q2 2015; change 2, retroactive to Q3 2015	1, 3	Subject to adjustment, beginning Q4 2017
12	Tier-2 Manufacturer PET Payout	\$0.25/lb	For Type 1 PET recycled output used as a feedstock in the manufacture of secondary products; currently \$0.25/lb	Effective Q3 2018	N/A	Initiated July 1, 2018; as a break-out from Non-Nylon
13	Tier-2 Manufacturer Polypropylene Payout	\$0.25/lb	For Type 1 Polypropylene recycled output used as a feedstock in the manufacture of secondary products; currently \$0.25/lb	Effective Q3 2018	N/A	Initiated July 1, 2018; as a break-out from Non-Nylon
14	Tier-2 Manufacturer Nylon 6 Payout	\$0.10/lb	For Type 1 nylon 6 recycled output used as a feedstock in the manufacture of secondary products; currently \$0.10/lb	Effective Q4 2017	NA	Initiated as a 6-month pilot, effective October 1, 2017 and remains in effect
15	Tier-2 Manufacturer Nylon 6,6 Payout	\$0.10/lb	For Type 1 Nylon 6,6 recycled output used as a feedstock in the manufacture of secondary products; currently \$0.10/lb	Effective Q1 2019	N/A	Initiated Q1 2019
16	Tier-2 Manufacturer PET Pellets Payout	\$0.11/lb	For CA generated PET fiber converted into PET Pellets.	Effective Q4 2019	N/A	Initiated Q1 2019

Table 10-1a. Collector/Sorters (CSEs): Summary of Subsidy and Incentive Payouts (Accessible Version)

#	Subsidy/ Incentives	Payout Rate	Description	Timeline/Date of Action	Addendum	Notice
1	CSE Reporting Incentive (CSE)	\$1,000 per month	No change anticipated	Initiated 2014	N/A	Incentive; not subject to guaranteed timeline
2	Broadloom Recycling Collected, Sold, and Shipped	\$0.02 per pound	For self-collected, sorted, sold, and shipped CA pounds.	California Program-approved under current Plan purview; retroactive to Q3 2015	3	Subject to adjustment, beginning Q4 2017
3	Reuse	\$0.10 per pound	For self-collected and shipped/sold or donated carpet tile or broadloom for the purpose of reuse	Effective Q2 2015; clarified June 2015 as applicable to the reuse of both broadloom and carpet tile, and retroactive to Q2 2015	1, 3	Subject to adjustment, beginning Q4 2017
4	Tile Reuse or Recycling Collected, Sold, and Shipped (PILOT)	\$0.05 per pound	For CA generated carpet tile collected, shipped and sold for recycle/reuse or donated for reuse.	Effective Q1 2018	N/A	Initiated as a 6-month pilot, effective January 1, 2018 and still in effect

Table 10-1b. Tier 1 Processors: Summary of Subsidy and Incentive Payouts (Accessible Version)

#	Subsidy/ Incentives	Payout Rate	Description	Timeline/Date of Action	Addendum	Notice
5	Tile Recycled	\$0.10 per pound	For carpet tile recycled output	Effective Q2 2015	1	Subject to adjustment, beginning Q4 2017
6	Type 1 Recycled Output Payout	\$0.10 per pound	Adjusted subsidy payout from \$0.06 per pound to \$0.10 per pound, tied to market indices; [Type 1 refers to recycled fiber output within ash content thresholds, currently less than 25% ash]	In Plan v.3.2.2 – March 2014; base payout rate adjustable, may be tied to market indicator using Models	3	\$0.06 per pound subject to adjustment, beginning; Q4 2017; \$0.04 per pound adjustable quarterly effective Jan. 2016.
7	Type 2 Recycled Output Payout	\$0.03 per pound	Type 2 refers to recycled output with higher ash content thresholds, currently more than 25% ash.	In Plan v.3.2.2 – March 2014	N/A	Subject to adjustment, beginning Q4 2017
8	Type 2 PC4 (Calcium Carbonate) Payout	\$0.17 per pound	Non-fiber recycled output containing predominately calcium carbonate for use as feedstock in secondary products; currently \$0.17 per pound	Change 1, effective Q2 2015; change 2, in June 2015; change 3, effective Q3 2015; [For use as a raw material (recycled output feedstock) only]	1, 3	Subject to adjustment, beginning Q4 2017

Table 10-1b. Tier 1 Processors: Summary of Subsidy and Incentive Payouts (Accessible Version) (continued)

#	Subsidy/ Incentives	Payout Rate	Description	Timeline/Date of Action	Addendum	Notice
9	Commercial Broadloom	\$0.02 per pound	For CA generated commercial broadloom recycled output. NOTE: this incentive is currently suspended and not in force	Initially slated to go into effect implemented Effective Q3 2018, but implementation suspended due to operational concerns	N/A	Initiated beginning Q3 2018
10	Highest Recyclability	\$0.05 per pound	For CA generated PCC fibers meeting the Highest Recyclability parameters defined by the HR Committee (Plan Table 6), and calculated through the Subsidy Justification Model. Beginning 1/1/19, N6 and N6,6 broadloom and carpet tile qualify for H.R. incentive.	Effective Q1 2019	N/A	Initiated Q1 2019

Table 10-1c. Tier 2 Manufacturers: Summary of Subsidy and Incentive Payouts (Accessible Version)

#	Subsidy/ Incentives	Payout Rate	Description	Timeline/Date of Action	Addendum	Notice
11	Tier 2 Manufacturer Non-Nylon Payout	\$0.25 per pound	For Type 1 non-nylon recycled output used as a feedstock in the manufacture of secondary products; currently \$0.25 per pound	Change 1, effective Q2 2015; change 2, retroactive to Q3 2015	1, 3	Subject to adjustment, beginning Q4 2017
12	Tier 2 Manufacturer PET Payout	\$0.25 per pound	For Type 1 PET recycled output used as a feedstock in the manufacture of secondary products; currently \$0.25 per pound	Effective Q3 2018	N/A	Initiated July 1, 2018; as a break-out from Non-Nylon
13	Tier 2 Manufacturer Polypropylene Payout	\$0.25 per pound	For Type 1 Polypropylene recycled output used as a feedstock in the manufacture of secondary products; currently \$0.25 per pound	Effective Q3 2018	N/A	Initiated July 1, 2018; as a break-out from Non-Nylon
14	Tier 2 Manufacturer Nylon 6 Payout	\$0.10 per pound	For Type 1 nylon 6 recycled output used as a feedstock in the manufacture of secondary products; currently \$0.10 per pound	Effective Q4 2017	N/A	Initiated as a 6-month pilot, effective October 1, 2017 and remains in effect

Table 10-1c. Tier 2 Manufacturers: Summary of Subsidy and Incentive Payouts (Accessible Version) (continued)

#	Subsidy/ Incentives	Payout Rate	Description	Timeline/Date of Action	Addendum	Notice
15	Tier 2 Manufacturer Nylon 6,6 Payout	\$0.10 per pound	For Type 1 Nylon 6,6 recycled output used as a feedstock in the manufacture of secondary products; currently \$0.10 per pound	Effective Q1 2019	N/A	Initiated Q1 2019
16	Tier 2 Manufacturer PET Pellets Payout	\$0.11 per pound	For CA generated PET fiber converted into PET Pellets.	Effective Q4 2019	N/A	Initiated Q1 2019

10.3 Map and List of Drop-off Sites

California Carpet Stewardship Program

Carpet Recycling Drop-Off Locations / Lugares donde llevar alfombras para reciclar



Carpet America Recovery Effort (CARE) is building a network of drop-off locations to recycle used carpet in California, including sites serviced by CARE as well as independent sites. For most up-to-date listings visit www.CarpetRecovery.org/CA.

Carpet America Recovery Effort (CARE) está formando una red de lugares donde se puedan dejar alfombras para reciclar, ya sea en lugares atendidos por CARE así como en participantes independientes. Para ver la lista más actualizada de lugares, visite www.CarpetRecovery.org/CA.



12-19

Drop-Off Locations by County

Before you visit: Contact drop-off location to confirm participation, business hours, types of carpet accepted and identification required.

Antes de su visita: Comuníquese con el lugar donde llevará las alfombras para confirmar que participan, el horario de atención al público, los tipos de alfombra que aceptan, así como la identificación que requieren.



Is Your Carpet Ready for Recycling?

Follow these simple steps to prepare carpet for recycling:

Step 1: Keep it Dry.

Step 2: Keep it Debris Free.

Remove tack strips, nails, trash and dirt

Step 3: Prepare the Carpet.

- Cut carpet into manageable sections
- Separate carpet from pad
- Roll carpet
- Roll, stack or fold carpet pad
- Stack carpet tile

Step 4: Drop off Carpet for Recycling.

To find a drop-off location near you, consult this guide or visit www.CarpetRecovery.org/CA.

Before your visit, call for business hours, types of carpet accepted and identification required.

Step 5: Save Money.

Recycling carpet may cost less than throwing it away. Ask if the drop-off site offers a reduced rate.

ALAMEDA COUNTY

City of Berkeley Transfer Station

1201 Second Street
Berkeley, CA 94710
510-981-7270

Fremont Recycling & Transfer

41149 Boyce Road
Fremont, CA 94538
510-252-0500

Hayward Transfer Station

3458 Enterprise Avenue
Hayward, CA 94545
510-606-1548

BUTTE COUNTY

Recology Butte

2720 South 5th Avenue
Oroville, CA 95965
530-342-4444

CALAVERAS COUNTY

Rock Creek Solid Waste Facility & Landfill

12021 Hunt Road
Milton, CA 95684
209-754-6403

CONTRA COSTA COUNTY

Contra Costa Waste Service

1300 Loveridge Road
Pittsburg, CA 94565
925-473-0180

DEL NORTE COUNTY

Del Norte County Transfer Station

1700 State Street
Crescent City, CA 95531
707-465-1100

EL DORADO COUNTY

El Dorado Disposal/Waste Connections

4100 Throwita Way
Placerville, CA 95667
530-295-2808

FRESNO COUNTY

West Coast Waste

3077 S. Golden State
Frontage Road
Fresno, CA 93725
559-497-5320

GLENN COUNTY

Glenn County Transfer Station

5700 County Road 33
Artois, CA 95913
530-624-0286

HUMBOLDT COUNTY

Hawthorne Street Transfer Station

1059 West Hawthorne Street
Eureka, CA 95501
707-268-8680

IMPERIAL COUNTY

Imperial Landfill

104 E. Robinson Road
Imperial, CA 92251
760-353-1100

INYO COUNTY

Bishop-Sunland Landfill

110 Sunland Indian
Reservation Road
Bishop, CA 93514
760-872-4126

KERN COUNTY

Bena Sanitary Landfill

2951 Neumarkel Road
Bakersfield, CA 93307
661-862-8900

KINGS COUNTY

Robinson's Interiors

230 N. 11th Avenue
Hanford, CA 93230
559-582-2610

LAKE COUNTY

Lake County Waste Solutions

230 Soda Bay Road
Lakeport, CA 95453
707-234-6412

LASSEN COUNTY

Zaengles Carpet One Floor & Home

2800 Main Street
Susanville, CA 96130
530-257-7788

LOS ANGELES COUNTY

American Reclamation

4560 Doran Street
Los Angeles, CA 90039
818-552-4068

Construction & Demolition Recycling, Inc.

9309 Rayo Avenue
South Gate, CA 90280
323-357-6900

EDCO Recycling & Transfer Signal Hill

2755 California Avenue
Signal Hill, CA 90755
562-997-1122

Grand Central Recycling & Transfer Station, Inc.

999 S. Hatcher Way
Industry, CA 91748
626-855-5538

LA Fiber

4920 S Boyle Avenue
Vernon, CA 90058
323-277-0627

Pomona Valley Transfer Station

1371 East Ninth Street
Pomona, CA 91766
909-643-2225

MARIN COUNTY

Marin Resource Recovery Center

565 Jacoby Street
San Rafael, CA 94901
415-485-5646

MARIPOSA COUNTY

Mariposa Landfill, Composting and Recycling Center

5593 Highway 49
North Mariposa, CA 95338
209-966-5165

MENDOCINO COUNTY

Solid Waste Systems

3151 Taylor Drive
Ukiah, CA 95482
707-234-6410

MERCED COUNTY

Merced County Regional Waste Management Authority Highway 59 Landfill

7040 North Highway 59
Merced, CA 95348
209-723-4481

MODOC COUNTY

Holdorff's Recycling

605 N Court Street
Alturas, CA 96101
530-233-3723

MONO COUNTY

Benton Crossing Landfill

899 Pit Road
Crowley Lake, CA 93546
760-937-2192

MONTEREY COUNTY

Monterey Regional Waste Management District

14201 Del Monte Boulevard
Marina, CA 93933
831-264-6373

Sun Street Transfer Station

139 Sun Street
Salinas, CA 93901
831-424-5535

NAPA COUNTY**Devlin Road Transfer Station**

889 Devlin Road
American Canyon, CA 94503
707-258-9005

Napa Recycling & Waste Services

820 Levitin Way
American Canyon, CA 94503
707-256-3500

ORANGE COUNTY**Sunset Transfer Station**

16122 Construction Circle
Irvine, CA 92606
949-654-1562

Upstream Textiles

281 N Puente Street
Brea, CA 92821
714-728-7233

PLACER COUNTY**Circular Polymers**

3390 Venture Drive
Lincoln, CA 95648
908-899-3060

Eastern Regional Landfill

900 Cabin Creek Rd
Truckee, CA 96161
530-583-7825

Western Placer Waste Management Authority

3195 Athens Avenue
Lincoln, CA 95648
916-543-3960

PLUMAS COUNTY**Delleker Transfer Station**

73980 Industrial Way
Delleker, CA 96122
530-832-4879

RIVERSIDE COUNTY**Robert A. Nelson Transfer Station/Agua Mansa MRF**

1830 Agua Mansa Road
Riverside, CA 92509
951-786-0544

SACRAMENTO COUNTY**Florin Perkins Public Disposal Site**

4201 Florin Perkins Road
Sacramento, CA 95826
408-938-4958

Kiefer Landfill

12701 Kiefer Boulevard and
Grant Line Road
Sloughhouse, CA 95683
916-875-5555

L and D Landfill

8635 Fruitridge Road
Sacramento, CA 95826
916-383-9420

North Area Recovery Station (NARS)

4450 Roseville Road
North Highlands, CA 95660
916-876-9446

SAN BENITO COUNTY**RJR Recycling**

1771 San Felipe Road
Hollister, CA 95023
831-636-7756

SAN BERNARDINO COUNTY**Advance Disposal Co.**

17105 Mesa Street
Hesperia, CA 92345
760-244-9773

Victor Valley MRF

17000 Abbey Lane
Victorville, CA 92394
760-241-1284

West Valley MRF and Transfer Station

13373 Napa Street
Fontana, CA 92335
909-899-5501

SAN DIEGO COUNTY**EDCO San Marcos Construction Demolition Processing Facility**

224 South Las Posas Road
San Marcos, CA 92078
760-744-2700

Otay Landfill

1700 Maxwell Road
Chula Vista, CA 91911
619-421-3773

Planet Recycling

187 Mace Street
Chula Vista, CA 91911
619-424-7545

SANCO Resource Recovery

6750 Federal Boulevard
Lemon Grove, CA 91945
619-287-7555

SAN FRANCISCO COUNTY**Recology San Francisco Transfer Station**

501 Tunnel Avenue
San Francisco, CA 94134
415-330-1400

SAN JOAQUIN COUNTY**Lovlace Transfer Station**

2323 E. Lovelace Road
Manteca, CA 95336
209-982-5770

North County Recycling Center & Sanitary Landfill

17720 E. Harney Lane
Lodi, CA 95240
209-877-3868

SAN LUIS OBISPO COUNTY**Cold Canyon Landfill**

2268 Carpenter Canyon Road
San Luis Obispo, CA 93401
805-549-8332

SAN MATEO COUNTY**Blue Line Transfer, Inc.**

500 E Jamie Court
South San Francisco, CA 94080
650-589-5511

SANTA BARBARA COUNTY**MarBorg Industries C&D Facility**

119 N Quarantina St
Santa Barbara, CA 93103
805-963-1852

SANTA CLARA COUNTY**Bay Counties SMaRT Station**

301 Carl Road
Sunnyvale, CA 94089
408-752-8530

GreenWaste Carpet Recycling

1201 North 15th Street
San Jose, CA 95112
408-938-4958

GreenWaste Recovery

625 Charles Street
San Jose, CA 95112
408-938-4958

Zanker Recycling

675 Los Esteros Road
San Jose, CA 95134
408-938-4958

SANTA CRUZ COUNTY**Ben Lomond Transfer Station**

9835 Newell Creek Road
Ben Lomond, CA 95005
831-336-3951

**¿Está su alfombra lista para ser reciclada?**

Siga los siguientes pasos simples para preparar alfombras para reciclarlas:

Paso 1: Manténgala seca.**Paso 2: Manténgala libre de desechos.**

Retire las tiras con tachuelas, clavos, basura y tierra.

Paso 3: Prepare la alfombra.

- Corte la alfombra en secciones fáciles de manejar.
- Separe la alfombra de la almohadilla
- Enrolle la alfombra.
- Enrolle, apile o doble la almohadilla para alfombra.
- Apile las losetas de alfombra modular.

Paso 4: Lleve la alfombra al lugar del reciclaje.

Para encontrar el lugar más cercano, consulte este guía o visite al www.CarpetRecovery.org/CA.

Antes de salir, llame para averiguar el horario de atención al público, los tipos de alfombra que aceptan y la identificación requerida.

Paso 5: Ahorre dinero.

Reciclar alfombras puede costar menos que llevarlas al vertedero. Pregunte si en el lugar donde se dejan para reciclar ofrecen una tarifa reducida.



Why Recycle Carpet?

More than 320 million pounds of carpet head to California landfills every year, where it stays for centuries without breaking down. But there is a better way: recycling.

Recycling carpet saves natural resources, conserves landfill space, and reduces dependency on fossil fuels.

Old carpet can be recycled and made into useful new products, like traffic signs, insulation, new carpet and carpet padding.

In 2010 California passed a Carpet Stewardship law to increase carpet recycling. Since then over 100 million pounds of carpet have been diverted from our landfills and recycled. By working together, we can do more!

This program is supported by Carpet America Recovery Effort (CARE). CARE works to create market-based solutions to increase carpet recycling and divert carpet from landfill.

Thank you for recycling!

¿Por qué reciclar alfombras?

Cada año en rellenos sanitarios de California se entierran más de 320 millones de libras de alfombras, donde permanecen por siglos sin descomponerse. Pero hay una mejor manera: reciclar.

Reciclar alfombras ahorra recursos naturales, conserva espacio en los rellenos sanitarios y reduce la dependencia de combustibles fósiles.

Las alfombras viejas pueden ser recicladas y convertidas en

nuevos productos útiles, como letreros de tránsito, aislamiento, alfombra nueva y almohadilla para alfombras.

En 2010 California aprobó una Ley de Administración de Alfombras para aumentar el reciclaje de alfombras. Desde entonces, más de 100 millones de libras de alfombra han sido derivadas de nuestros rellenos sanitarios y recicladas.

¡Trabajando juntos podemos hacer más!

Buena Vista Landfill - Santa Cruz County
1231 Buena Vista Drive
Watsonville, CA 95076
831-454-5153

City of Santa Cruz Resource Recovery Facility
605 Dimeo Lane
Santa Cruz, CA 95060
831-420-6270

SHASTA COUNTY West Central Landfill
14095 Clear Creek Road
Igo, CA 96047
530-396-2555

SISKIYOU COUNTY Black Butte Transfer Station
3710 Spring Hill Road
Mount Shasta, CA 96067
530-926-1610

Oberlin Road Transfer Station
2420 E Oberlin Road
Yreka, CA 96097
530-842-5865

SOLANO COUNTY Recology Hay Road
6426 Hay Road
Vacaville, CA 95687
707-678-471

Recology Vacaville Solano
855½ Davis Street
Vacaville, CA 95687
707-448-2945

STANISLAUS COUNTY The New Tin Yard
623 Kansas Ave
Modesto, CA 95251
209-522-6456

SUTTER/YUBA COUNTIES Recology Sutter - Yuba
3001 Levee Road
Marysville, CA 95901
530-743-6933

TEHAMA COUNTY Tehama County/ Red Bluff Landfill
19995 Plymire Rd
Red Bluff, CA 96080
530-528-1102

TRINITY COUNTY The Floor Store (Retail store)
1306 Nugget Lane
Weaverville, CA 96093
530-623-6600

TULARE COUNTY Franeys Carpet One Floor & Home
525 N Liberty Street
Visalia, CA 93292
559-733-9990

TUOLUMNE COUNTY Cal Sierra Transfer Station
19309 Industrial Drive
Sonora, CA 95370
209-532-1413

Sonora Recycling, LLC
18647 Eagle Ridge Drive
Sonora, CA 95370
209-536-4214

VENTURA COUNTY Del Norte Regional Recycling and Transfer Station
111 S Del Norte Boulevard
Oxnard, CA 93030
805-385-8060

10.4 Map of Public and Private Carpet Collection Sites

The map below shows 277 public and private carpet collection sites in California and shows the number of sites per county. The table on the following page lists counties with their number of total sites and CARE drop-off sites.



*Data provided by CARE; as of Dec 2019

Table 10-2. Collection Sites in California Counties, 2019

#	County Name	Rank*	Total Sites	Public Drop-off Sites
1	Alameda	#7	24	3
2	Alpine	N/A	0	0
3	Amador	N/A	0	0
4	Butte (also serves Colusa)	N/A	3	1
5	Calaveras	N/A	2	1
6	Colusa	N/A	0	0
7	Contra Costa	#9	6	1
8	Del Norte	N/A	1	1
9	El Dorado	N/A	3	1
10	Fresno	#10	5	1
11	Glenn	N/A	1	1
12	Humboldt	N/A	1	1
13	Imperial	N/A	1	1
14	Inyo	N/A	1	1
15	Kern	N/A	2	1
16	Kings	N/A	1	1
17	Lake	N/A	1	1
18	Lassen	N/A	1	5
19	Los Angeles	#1	52	0
20	Madera	N/A	0	1
21	Marin	N/A	1	1
22	Mariposa	N/A	1	1
23	Mendocino	N/A	1	1
24	Merced	N/A	1	1
25	Modoc	N/A	1	1
26	Mono	N/A	1	1
27	Monterey	N/A	3	2
28	Napa	N/A	3	2
29	Nevada	N/A	2	0
30	Orange	#3	11	2
31	Placer	N/A	6	2

#	County Name	Rank*	Total Sites	Public Drop-off Sites
32	Plumas	N/A	1	1
33	Riverside	#4	9	1
34	Sacramento	#8	30	4
35	San Benito	N/A	1	1
36	San Bernardino	#5	8	3
37	San Diego	#2	36	3
38	San Francisco	N/A	2	1
39	San Joaquin	N/A	6	2
40	San Luis Obispo	N/A	1	1
41	San Mateo	N/A	5	1
42	Santa Barbara	N/A	2	1
43	Santa Clara	#6	12	1
44	Santa Cruz	N/A	4	3
45	Shasta	N/A	1	1
46	Sierra	N/A	0	0
47	Siskiyou	N/A	2	2
48	Solano	N/A	3	2
49	Sonoma	N/A	2	0
50	Stanislaus	N/A	2	1
51	Sutter	N/A	4	0
52	Tehama	N/A	1	1
53	Trinity	N/A	1	1
54	Tulare	N/A	1	1
55	Tuolumne	N/A	2	2
56	Ventura	N/A	2	1
57	Yolo	N/A	2	1
58	Yuba	N/A	1	1

***Rank** by population if in top ten (for example, Los Angeles County is #1); shaded in light green.

10.5 List of Participating Mills, Subsidiaries, and Brands

Active Mills

CARE AB 2398 Reporting

Registered Manufacturers List – Updated as of 3/11/2020, Provided by Mills – Modified by Aprio

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (changes since last list)
1	A.M. Claret (formerly and DBA Alliance Textiles)	N/A	218 River Drive	Cartersville	GA	N/A
2	Apache Mills (formerly Berkshire Flooring)	Berkshire Flooring, Inc.	P.O. Box 907	Calhoun	GA	N/A
3	Balta Group (Modulyss)	Balta Rugs, ITC, Modulyss, Balta Broadloom, and Captiqs	6739 New Calhoun Hwy, Bldg. #100	Rome	GA	N/A
4	Beaulieu Canada Company	N/A	335 Rue Roxton	Acton Vale, Quebec, Canada	QC	N/A
5	Bellbridge Inc	Westbrook and Carpets of New Zealand	5401 Industrial Way	Benicia	CA	N/A
6	Bentley Prince Street (BPS Parent, Inc.)	Bentley Mills, Inc.	14641 East Don Julian Road	City of Industry	CA	N/A
7	Best Carpet Values, Inc./W.R. Inc.	Innovative Ind., S & J Carpet, Best Carpet Value	P.O. Box 1639	Chatsworth	GA	N/A

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (changes since last list)
8	Bloomsburg Carpet Ind., Inc.	N/A	4999 Columbia Blvd	Bloomsburg	PA	N/A
9	Brintons Carpets	Brintons	1000 Cobb Place Blvd., Bldg. 200, Suite 200	Kennesaw	GA	N/A
10	CAP Carpet Inc	Aircraft Interior Products, White Oak Custom Carpets, MRM by White Oak, LLC	535 Emerson St.	Wichita	KS	N/A
11	Catalina Carpet Mills, Inc	N/A	14418 Best Ave.	Santa Fe Springs	CA	N/A
12	Couristan, Inc.	N/A	Two Executive Drive	Fort Lee	NJ	N/A
13	Crossley Holdings of South Africa	Crossley Axminster	P.O. Box 1777	Greenville	MS	N/A
14	Daltonian Flooring Inc	N/A	115 Old Belwood Road	Calhoun	GA	N/A
15	Design Manufacturing International, LLC.	N/A	17 Vincent Circle	Warminster	PA	N/A
16	Design Materials, Inc.	N/A	241 S. 55th Street	Kansas City	KS	N/A
17	Earth Weave Carpet Mills Inc.	N/A	P.O. Box 6120	Dalton	GA	N/A

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (changes since last list)
18	ECMC, LLC dba CM Hospitality Carpets	N/A	2304 Dalton Industrial Court	Dalton	GA	N/A
19	Egetaepper a/s.	Ege Americas Inc	Industrivej Nord 25, P.O. Box 190	Herning, Denmark	DK	N/A
20	Emerald Carpet, Inc.	Emerald, Mainline	P.O. Box 1625	Dalton	GA	N/A
21	Emery Park Carpet Company	N/A	105 N. Industrial Blvd	Calhoun	GA	N/A
22	Engineered Floors	N/A	P.O. Box 2207	Calhoun	GA	N/A
23	Event Carpet Pros, Inc.	N/A	14301 Alondra Blvd.	La Mirada	CA	N/A
24	Exploring, Inc. dba Brumark	Shelmarc	3655 Atlanta Ind. Dr. #100	Atlanta	GA	New mill in Q4 2019
25	Fibreworks Corporation	N/A	2301 Brennen Business Ct.	Louisville	KY	N/A
26	Forbo Flooring Systems	N/A	8 Maplewood Drive	Hazle Township	PA	N/A
27	Foss Manufacturing Co LLC	N/A	243 Huffaker Road, NW	Rome	GA	N/A
28	iCarpetiles.com., Inc.	N/A	P.O. Box 6003	Louisville	KY	N/A
29	Indian Summer Carpet Mills, Inc	N/A	601 Callahan Road	Dalton	GA	N/A

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (changes since last list)
30	Twitchell Technical Products LLC (Infinity)	Infinity Woven Products LLC	5211 Mitchell Bridge Rd	Dalton	GA	N/A
31	Innovative Carpets, LLC	N/A	45 Legion Drive	Cresskill	NJ	N/A
32	Innovative Tile Technologies LLC	N/A	1505 Coronet Dr	Dalton	GA	N/A
33	Interface Americas, Inc.	Includes: Interface FLOR LLC, FLOR, and Interface Services	1000 Marietta Street NW Suite 238	Atlanta	GA	N/A
34	J Mish LLC	N/A	8 River Drive	Cartersville	GA	N/A
35	Joy Carpets & Co.	N/A	P.O. Box 5379	Fort Oglethorpe	GA	N/A
36	Julie Industries, Inc.	N/A	P.O. Box 153	North Reading	MA	N/A
37	Kaleen Rugs, Inc.	N/A	1013 Bonny Oaks Dr.	Dalton	GA	N/A
38	Art Flock & Screen Inc (Kane Carpet)	Kane Carpet	214 Ditmas Avenue	Brooklyn	NY	N/A
39	Excel Carpet (Kinsley Carpet Mills)	Kinsley Carpet	P.O. Box 1351	Dalton	GA	N/A
40	Lancer Enterprises, Inc.	Lancer Enterprises, Inc.	P.O. Box 1505	Dalton	GA	N/A
41	Langhorne Carpet Co Inc.		P.O. Box 7175	Penndel	PA	N/A
42	Lexmark Carpet Mills Inc.	Northwest Carpets	285 Kraft Drive	Dalton	GA	N/A

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (changes since last list)
43	Lonesome Oak Trading Co., Inc.	N/A	P.O. Box 216	Chatsworth	GA	N/A
44	Mannington Mills, Inc.	Mannington Commercial	P.O. Box 12281	Calhoun	GA	N/A
45	Marquis Industries, Inc.	Includes: Marquis Industries, Omega Pattern Works, Artisans Hospitality, and Astro Carpet Mills	2743 Hwy 76 P.O. Box 1308	Chatsworth	GA	N/A
46	Mathews & Parlo Carpet Wholesalers, Inc	N/A	196 Belwood Rd SE	Calhoun	GA	N/A
47	Merida Meridian Inc	N/A	1 Design Center Pl. Suite 714	Boston	MA	N/A
48	Millennium Carpet Mills Inc.	N/A	P.O. Box 1079	Chatsworth	GA	N/A
49	Milliken & Company	Milliken Flooring	920 Milliken Road, M-620 Dock B	Spartanburg	SC	N/A
50	Mohawk Industries, Inc.	N/A	160 S. Industrial Blvd	Calhoun	GA	N/A
51	Colin Campbell & Sons Ltd./Nature's Carpet	N/A	55-8385 Fraser St.	Vancouver, British Columbia, Canada	BC	N/A

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (changes since last list)
52	Next Floor Inc.	N/A	1857 Sawmill Rd. #202	Conestogo, Ontario, Canada	ON	N/A
53	Nourison Industries Inc.	N/A	5 Sampson St	Saddle Brook	NJ	N/A
54	Patriot Mills (FKA as Manassas Textiles)	N/A	P.O. Box 470	Adairsville	GA	N/A
55	Perfect Flooring dba Shelmarc	N/A	3655 Atlanta Ind. Dr. #100	Atlanta	GA	New mill in Q4 2019
56	Pharr Yarns, LLC d/b/a Phenix	N/A	1001 Enterprise Dr	Dalton	GA	N/A
57	Prestige Mills	N/A	3401 38th Avenue	Long Island City	NY	N/A
58	Harris Flooring Group (formerly Q.E.P. and Kraus)	N/A	P.O. Box 704	Clarion	PA	Name change in Q4 2019
59	R.C. Willey Home Furnishings, Inc.	N/A	2301 S. 300 W.	Salt Lake City	UT	N/A
60	RADICI USA, INC	N/A	P.O. Box 3143	Spartanburg	SC	N/A
61	Relative Space (Floorworks)	N/A	400 West Broadway	NY	NY	N/A

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (changes since last list)
62	Royal Thai Americas, Inc.	N/A	715 Curtis Parkway SE	Calhoun	GA	N/A
63	Scott Group Custom Carpets, DBA Scott Group Studio	N/A	3232 Kraft Ave. SE	Grand Rapids	MI	N/A
64	Shaheen Carpet Mills	Carpets by Sierra	P.O. Box 167	Resaca	GA	N/A
65	Shaw Industries, Inc.		P.O. Drawer 2128	Dalton	GA	N/A
66	Signature Hospitality Carpet LLC	Signature Hospitality Carpets	P.O. Box 1328	Dalton	GA	N/A
67	Stanton Carpet Corporation	Stanton Carpet	100 Sunnyside Blvd.	Woodbury	NY	N/A
68	Stark Carpet Corp	N/A	979 Third Ave	New York	NY	N/A
69	Summit Flooring	N/A	1 Apollo Drive	Whippany	NJ	N/A
70	TaiPing Carpets Americas Inc	N/A	P.O. Box 249	Adairsville	GA	N/A
71	Tarkett Finance Inc.	Tarkett USA	3000 Aurora Road	Solon	OH	N/A
72	The Dixie Group, Inc.	Includes: TDG Operations, LLC, and Fabrica International, Inc.	P.O. Box 2007	Dalton	GA	N/A
73	The Miller Davis Group	N/A	300 West 28th Street	Chattanooga	TN	N/A
74	Totally Enterprises, LLC	N/A	404 Mitchell St.	Dalton	GA	N/A

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (changes since last list)
75	Ulster Carpet Mills (North America) Inc	N/A	81 Whitlock Avenue SW	Marietta	GA	N/A
76	Unique Carpets Ltd.	N/A	7360 Jurupa Avenue	Riverside	CA	N/A
77	vanGelder	N/A	300 Union Grove Road	Calhoun	GA	New mill in Q4 2019

END OF ACTIVE LIST

Mills No Longer Active

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (Changes since last list)
1	Fortune Contract, Inc.	N/A	P.O. Box 2287	Dalton	GA	N/A
2	Wellington	N/A	40087 Mission Blvd #170	Fremont	CA	N/A
3	Royalty Carpet Mills, Inc.	Includes: Camelot Carpet Mills, Pacificrest Mills, and Moda	17111 Red Hill	Irvine	CA	N/A
4	ATM Floor Covering, Inc.	N/A	P.O. Box 1012	Dalton	GA	N/A
5	Beaulieu Group LLC	Includes: Aqua, Armstrong FashionSmart, Armstrong FashionSmart B, Beaulieu, Beaulieu Commercial, Beaulieu Engineered Fabrics & Fibers, Beaulieu of America, Bliss Aligned Dealer Program, Bliss by Beaulieu, Bliss Flooring Solutions, BOA Distributor Div., BolYu, Cambridge, Citation, Compass, Coronet Carpets, Coronet SFC, Hollytex, Interloom, Laura Ashley, Property Management Solutions, Pure, Royalist, and Surfaces,	P.O. Box 1248	Dalton	GA	

ID	Parent Company	Sub Companies	Mailing Address	City	State	NOTES (Changes since last list)
6	Hibernia Woolen Mills	N/A	9829 Carmenita Road, Unit D	Whittier	CA	N/A
7	Riviera Carpets	N/A	402 Beamer Road	Calhoun	GA	N/A
8	Godfrey Hirst USA, Inc.	Includes: IDG, Carpet One, Flooring America, Pro Source, Abbey, Floors to Go, NRF, Carpets Plus, FCI, and FCA	7629 Adairsville HWY, P.O. Box 849	Adairsville	GA	Acquired by Mohawk in Q3 2018. No changes to subs and brands list until further information received from Mohawk at the end of Q3.
9	Woolshire Carpet Mills Inc.	N/A	P.O. Box 66	Calhoun	GA	Acquired by Jmish
10	Savnik & Company, Inc.	N/A	601 McClary Avenue	Oakland	CA	Close for business Q1 2019.

END OF NO LONGER ACTIVE LIST

Subsidiaries (Alphanumeric Order)

CARE AB 2398 Reporting

Subsidiaries and Brands List – Updated as of 2/11/2020 Provided by Mills – modified by Aprio

Aircraft Interior Products	ITC
Artisans Hospitality	Kane Carpet
Astro Carpet Mills	Kinsley Carpet
Balta Broadloom	Lancer Enterprises, Inc.
Balta Rugs	Mannington Commercial
Bentley Mills, Inc.	Marquis Industries
Berkshire Flooring, Inc.	Mainline
Best Carpet Value	Milliken Flooring
Brintons	Modulyss
Captiqs	Mohawk
Carpets by Sierra	MRM by White Oak, LLC
Carpets of New Zealand	Northwest Carpets
Crossley Axminster	Omega Pattern Works
Ege Americas Inc	S & J Carpet
Emerald	Shelmarc
Fabrica International, Inc.	Signature Carpets
FLOR	Stanton Carpet
Harris Flooring	Tarkett USA
Infinity Woven Products LLC	TDG Operations, LLC
Innovative Ind.	Westbrook
Interface Services	White Oak Custom Carpets
InterfaceFLOR, LLC	

Brands (Alphanumeric Order)

Abby	Cherokee Carpet
Adorra	Clayton Miller
Advantage XL	Concepts International
Aircraft Interior Products	Core Elements
Aladdin	Cornerstone
Aladdin CCA NET	Coronet
Aladdin Color Center	Couristan
Aladdin Commercial	Creative Carpets
All American Carpet Tiles	Crescent
Alliance Textiles	Crossley Axminster
American Basic Natural Fusion	Crossley of South Africa
American Home Fashions of California	Crosspoint
Antrim	Davis & Davis Rugs
Anything Goes	Design Distinction
Artisan's Hospitality	Design Materials
Astro Carpet Mills	Desso
Atelier	Dixie Home
Atlas Carpet Mills	Dixie International
Aviation Commercial	Dolce Vita
Axminster Carpet	DOWNS
Balta Broadloom	Downs Decade
Balta Rugs	Dream Weaver
Balta Tiles	Duralock
BEDFORD MILLS	DURAPOINT
Bellbridge	DURAWEAVE / DURAWEAVE ELITE
BENEFITS	Duraweave Elite
Bentley	Durkan Commercial
Berkshire Flooring	Durkan Hospitality
Best of Stainmaster	Dwellings
Bigelow	Earth Weave
Bigelow Commercial	EcoFi
Bliss	Ecorug
Bloomsburg Carpet	Edwards Fields
Bomat	EF Contract
Brintons	EF Hospitality
Cadence	ege
Captiqs	Emerald
Carpet Concept	Emery Park Carpet Co
Carpets by Sierra	EMPIRE
Catalina Home	Engineered Floors Multifamily
Cavan Carpets	Essentials

Evans & Black	Interlude - Carpet One
Extreme Value	ITC, Arc Edition, Balta Broadloom
EZ Carpet	J&J Flooring Group
Fabrica	Jmish
Farmer's Market	Johnsonite
Fibreworks	Joy Carpets
First Impressions	Kaleen Rugs, Inc.
Floorcraft	Kane Carpet
Floorscapes	Karastan
Floorscapes - ALD	Karastan / Helios
Floorscapes - CWC	Karastan Ambassador
Floorz	Karastan Contract
Floorz Aladdin	Karastan Gallery Des
FLOR	Karastan Roll Runner
Flotex	Karastan Rug
Foss	Karastan Wool
Fossshield	Kinetex
Gibraltar	Kinsley Carpet
Glen Eden Wool Carpets	Kona Coast
Godfrey Hirst NA	Kraus Flooring
Green Select	Lancer Enterprises, Inc.
Gulistan	Langhorne Carpet
Hagaman	Larsen
Harding	Lees Carpet
Harding Factory Direct	Lees Studio
HDC Home Decoration Collection	Lexmark Adorn
Hearth & Home	Lexmark Expo
HEATHERFIELD	Lexmark Hospitality
Hibernia	Lexmark Living
Hokanson	Lexmark Tailored
Hollytex	Liffproof
Home & Office	Lock Mat
Home Foundation	Lonesome Oak Trading Co.
Home Showcase	Loomtex
Home Solutions	Looptex
Home Value	Louis Dabbieri
Homecraft	Low Boy
Horizon	Luxury Woven Vinyl
Image	Luzern Ltd
Innovative Tile Technologies	Main Street Tile
Innovia / Innovia Touch	Mainline
Interface Services	Mannington
InterfaceFLOR	Mantra

Marquis Industries	Queen
Masland Carpets and Rugs	Queen Commercial
Masland Contract	R.C. Willey
Masland Hospitality	RADICI USA
Mathews & Parlo	Regency Grande
Merida	Relax It's Lees / Lees Studio
MERIT	Resista / Resista Soft
Milliken	Rosecore
Missoni	Royal Dutch
Modular Mat	Royal Thai
modulyss	Scott Group Studio
Mohawk	Select A Floor
Mohawk Color Center	Select Elements
Mohawk Commercial	Selecta Floor
MRM by White Oak, LLC	Shaheen Carpet
Nature's Carpet	Shaw
Naturion	Shaw Contract
Nautilus	Shaw Floors
Next Floor	Shaw Home Foundations
Nood Fashion	Shaw Hospitality
Northstar Flooring Design	ShawMark
Northwest Hospitality	Signature Carpets
Nourison	Signature Series
Nourtex	Signature Series-ALD
OfficeSmart	Signature Series-HZN
Omega Pattern Works	Silspun
Ozite	Silver Creek
Patcraft	Simply Seamless
Patriot Mills	Smart Transformations
Peerless	Smartback
Pentz	Softspring
Phenix	Somerset House
Philadelphia	Southwind Carpet
Philadelphia Commercial	St. Jude Flooring
Platinum Plus	Stainmaster
Plaza Portfolio	Stainmaster Core
Portico	Stainmaster Fashion Essentials
Portico Estate	Stanton
Portico Select	Stark
Premier Stainmaster	Stark Studio Rugs
Prestige Mills	StaticSmart
PROPERTIES BY MOHAWK	Style Smart
PWV	Sutton Carpet

Tai Ping Tent
Tandus Centiva
The Atlas Group
Totally Enterprises, LLC
Traffic Master
Tuftex
Tuva
Ulster Carpet Mills
Unique Carpets Ltd.
Valour

Vernon House
Vista Carpet
Vorwerk
WEAVEPOINT
Weavetuft
White Oak Custom Carpets
Wunda Weve
Wundaweve Carpets
WW Floorscapes
You Home Style

10.6 Data Sources for Report Figures and Tables in Accessible Format

Note that Table and Figure numbers in this Appendix are matched to those in the main report body for ease of reference.

Figure 2-1 and Figure 5-17. Price of Crude Oil in Dollars per Barrel over Time (Data Table)

This figure shows changes in oil prices over time since January 2016.

Month-Year	Cushing, OK WTI Spot Price FOB (Dollars per Barrel)
Jan-2016	31.68
Feb-2016	30.32
Mar-2016	37.55
Apr-2016	40.75
May-2016	46.71
Jun-2016	48.76
Jul-2016	44.65
Aug-2016	44.72
Sep-2016	45.18
Oct-2016	49.78
Nov-2016	45.66
Dec-2016	51.97
Jan-2017	52.50
Feb-2017	53.47
Mar-2017	49.33
Apr-2017	51.06
May-2017	48.48
Jun-2017	45.18
Jul-2017	46.63
Aug-2017	48.04

Month-Year	Cushing, OK WTI Spot Price FOB (Dollars per Barrel)
Sep-2017	49.82
Oct-2017	51.58
Nov-2017	56.64
Dec-2017	57.88
Jan-2018	63.70
Feb-2018	62.23
Mar-2018	62.73
Apr-2018	66.25
May-2018	69.98
Jun-2018	67.87
Jul-2018	70.98
Aug-2018	68.06
Sep-2018	70.23
Oct-2018	70.75
Nov-2018	56.96
Dec-2018	49.52
Jan-2019	51.38
Feb-2019	54.95
Mar-2019	58.15
Apr-2019	63.86
May-2019	60.83
Jun-2019	54.66
Jul-2019	57.35
Aug-2019	54.81
Sep-2019	56.95
Oct-2019	53.96
Nov-2019	57.03
Dec-2019	59.88

Figure 2-2 and Figure 3-1. Recycling Rate, 2016–2019 (Data Table)

This figure shows changes in the Program’s quarterly recycling rate since 2016.

Time Period	Recycling Rate
Q1 2016	9.3%
Q2 2016	11.0%
Q3 2016	12.0%
Q4 2016	11.4%
Q1 2017	16.3%
Q2 2017	12.6%
Q3 2017	13.4%
Q4 2017	13.9%
Q1 2018	14.5%
Q2 2018	16.3%
Q3 2018	14.9%
Q4 2018	15.6%
Q1 2019	15.6%
Q2 2019	18.4%
Q3 2019	19.9%
Q4 2019	22.5%

Figure 2-3 and Figure 5-18. Comparison of California Recycling Rates for Materials Statewide and for Post-Consumer Carpet (PCC) (Data Table)

This figure shows changes in the Program’s annual recycling rate compared with California’s statewide recycling rate.

Year	California Statewide Recycling Rate	Carpet Recycling Rate	Recycled Output	Discards	%	Average
2010	49%	N/A	N/A	N/A	N/A	N/A
2011	49%	7%	12,007,464	181,035,738	6.6%	6.50%
2012	50%	10%	35,989,586	356,976,943	10.1%	10.00%
2013	50%	12%	44,109,514	363,567,389	12.1%	12.20%
2014	50%	12%	43,396,993	357,671,462	12.1%	12.10%
2015	47%	10%	34,823,391	345,197,320	10.1%	10.10%
2016	44%	11%	37,653,664	342,786,873	11.0%	10.90%
2017	42%	14%	47,240,340	337,747,780	14.0%	14.10%
2018	40%	15%	49,307,404	321,586,925	15.3%	15.30%
2019	N/A	19%	N/A	N/A	N/A	N/A

Table 2-1 and Table 3-1. Summary of 2019 Program Performance Metrics (Accessible Version)

This table shows key metrics from the Program in the baseline year (2011/2012) and the most recent three years. See Table Notes [bracketed numbers] following the table for future explanations.

Metric	Unit	Baseline [1]	2017	2018	2019
Carpet Sold in CA	Million square yards	98	90	86	81
Assessment Paid	Million dollars	\$4.9	\$22.7	\$21.6	\$28.2
Assessment	\$ per square yard	\$0.05	\$0.25	\$0.25	\$0.35
Total Expenses (All inclusive)	Million dollars	\$1.6	\$16.7	\$18.6	\$24.0
Post-Consumer Carpet (PCC) Discards	Million pounds	357	338	322	304
Gross Collection (GC) (recovered before recycling), also known as “Throughput” [2]	Million pounds	100	98	94	82
GC: % of Discards	% of Discards	28%	29%	29%	27%
Yield: % of GC (GC:RO)	% of GC	28%	48%	53%	71%
Recycled Output (RO) (reuse, tile recycled, fiber, deploy, calcium carbonate, filler, carcass) [3]	Million pounds	28	47	49	58
RO: % of Discards	% of Discards	8%	14%	15%	19%
Recycling Rate	RO:PCC	8%	14%	15%	19%
Recycled Fiber Type 1 Processor Output	Million pounds	22	36	36	42
Recycled PC4	Million pounds	N/A	11	13	14
Recycled Tile	Million pounds	0.3	0.9	0.5	0.6
Reuse	Thousand pounds	98	414	734	717
Depoly, Filler, Carcass	Million pounds	6	0	0	0.2

Metric	Unit	Baseline [1]	2017	2018	2019
Non-Nylon Tier 2 Manufacturer Output	Million pounds	N/A	19	22	19
Nylon 6 Tier 2 Manufacturer Output	Million pounds	N/A	Note [4]	3	7
Reported Diversion (RO, kiln, CAAF, WTE, exports) [5]	Million pounds	47	62	52	58
Reported Diversion: % of Discards	% of Discards	13%	18%	16%	19%
Reported Diversion: % of GC	% of GC	47%	63%	55%	71%
Carpet As Alternative Fuel (CAAF): NON-Subsidized, 2018–2019 [6]	Thousand pounds	0	17	0	2
CAAF: % of Discards	% of Discards	0.00%	0.00%	0.00%	0.00%
CAAF: % of GC	% of GC	0.00%	0.02%	0.00%	0.00%
Kiln: NON-Subsidized, 2018–2019 [6]	Million pounds	0.0	1.9	0.0	0.0173
Kiln: % of Discards	% of Discards	0.00%	0.58%	0.00%	0.01%
Kiln: % of GC	% of GC	0.00%	1.99%	0.00%	0.02%
Waste-To-Energy (WTE) – Never Subsidized (WTE:PCC) [6]	Million pounds	15.7	9.8	1.8	0.0
WTE: % of Discards	% of Discards	4%	3%	1%	0%
WTE: % of GC	% of GC	16%	10%	2%	0%
Net Diversion (calculated as GC minus Waste back to LF) [7]	Million pounds	78	79	70	66
Net Diversion: % of Discards	% of Discards	22%	23%	22%	22%
Net Diversion: % of GC	% of GC	78%	80%	75%	80%

Metric	Unit	Baseline [1]	2017	2018	2019
Source Reduction (SR)	Pounds per square yard	4.2	4.39	4.39	4.48
Pad Recycling (not counted toward diversion)	Million pounds	3.2	5.9	9.1	8.5
Waste to Landfill (LF) [8]	Million pounds	22.2	19.4	23.2	16.1
Total PCC Waste Disposal to LF [9]	Million pounds	279	259	251	238
Greenhouse Gas (GHG) Emissions	MTCO ₂ E	-24,926	-49,187	-58,029	-70,118

Table Notes: The table above compares Baseline Year (7/2011–6/2012) with data from the three most recent calendar years (2017–2019). For data from 2012–2016, see [Annual Report 2017](#). The table has been amended to include Advisory Committee comments: deleted Reported Diversion which had included carpet cushion/pad, denotes NON-subsidized categories which contribute to Diversion (see Note [6] below). Metric definitions are current at the end of 2019; definitions have evolved over time and may have been different in the past.

- [1] **Baseline** year is July 2011 through June 2012. All other years are calendar years (January through December).
- [2] **Gross Collection (GC)** is the quantity of material recovered before recycling, also known as "Throughput."
- [3] **Recycled Output (RO)** includes reuse, tile recycled, fiber, depoly, calcium carbonate, filler, and carcass.
- [4] **Nylon 6** subsidy was implemented in Q4 2017. However, the nylon 6 pounds were explicitly omitted from the 2017 total due to confidentiality concerns because all pounds were submitted by a single manufacturer. Nylon 6 pounds are reported in 2019 because multiple manufacturers are now reporting pounds in this category.
- [5] **Reported Diversion** consists of Recycled Output (RO), kiln, CAAF, WTE, and exports.
- [6] **CAAF and Kiln** were NOT subsidized in 2018 and beyond. **WTE** has never been subsidized.
- [7] **Net Diversion** is calculated as Gross Collection minus Waste back to Landfill.
- [8] **Waste to Landfill (LF)** refers to waste generating during processing, also referred to as processing waste.
- [9] **Total PCC Waste Disposal to Landfill** refers to all PCC waste disposed of in a landfill, inclusive of process waste. It is calculated as the difference between the total PCC Discards minus Net Diversion.

Figure 2-4. Carpet Materials Flow Diagram, 2019 (Data Table)

This figure shows the flows of carpet materials in California from collections through recycled output. The text in the main report describes the flows of materials, and the numbers are provided in the table below.

Carpet Flow	Millions of Pounds
CARE Drop-off Sites	10.2
Private Collections	71.9
Collector/Sorters: Gross Collections of PCC and Pad	82.1
Padding	8.5
Collector/Sorters: Gross Collections of PCC (minus pad)	73.6
Incoming Carpet to Processors	63.1
Total of WTE, Landfill, Export, CAAF/Kiln	16.6
Waste to Energy (WTE)	0
Landfill	16.1
Export	0.5
CAAF/Kiln	0.02
Reuse	0.7
PET	24.5
Nylon 6	10.5
Nylon 6,6	5.4
Polypropylene (PP)	2.0
Carpet Tile	0.6
Carcass	0.2
Post-Consumer Carpet Calcium Carbonate (PC4)	14.1
Recycled Output	58.0

Figure 4-2. Northern California Regional Approaches Drop-off Site Pounds Collected, 2016–2019 (Quarterly) (Data Table)

This figure shows the pounds of carpet materials collected quarterly in the greater Sacramento area from 2016 to 2019.

Year	Time Period	Sum of Pounds
2016	Annual Total	526,570
2016	Q1	34,340
2016	Q2	220,890
2016	Q3	185,320
2016	Q4	86,020
2017	Annual Total	680,801
2017	Q1	77,721
2017	Q2	156,640
2017	Q3	127,620
2017	Q4	318,820
2018	Annual Total	2,060,536
2018	Q1	192,860
2018	Q2	524,636
2018	Q3	508,040
2018	Q4	835,000
2019	Annual Total	1,623,968
2019	Q1	362,860
2019	Q2	472,408
2019	Q3	545,380
2019	Q4	243,320
Total	2016 to 2019	4,891,875

Figure 4-3. Southern California Regional Approaches Drop-off Site Pounds Collected, 2016–2019 (Quarterly) (Data Table)

This figure shows the pounds of carpet materials collected quarterly in the greater Los Angeles area from 2016 to 2019.

Year	Time Period	Sum of Pounds
2016	Annual Total	20,010
2016	Q1	0
2016	Q2	0
2016	Q3	12,580
2016	Q4	7,430
2017	Annual Total	92,740
2017	Q1	0
2017	Q2	26,060
2017	Q3	27,540
2017	Q4	39,140
2018	Annual Total	557,680
2018	Q1	93,060
2018	Q2	136,140
2018	Q3	133,740
2018	Q4	194,740
2019	Annual Total	1,065,240
2019	Q1	112,340
2019	Q2	175,380
2019	Q3	306,560
2019	Q4	470,960
Total	2016 to 2019	1,735,670

Figure 4-5. Regional Approach Drop-off Site Pounds Collected, 2016–2019 (Data Table)

This figure shows the pounds of carpet materials collected annually in the regional approaches for the greater Los Angeles, San Diego, and Sacramento areas from 2016 to 2019.

Year	Greater Sacramento Area	Greater San Diego Area	Los Angeles County	Pounds Collected
2016	526,570	N/A	20,010	546,580
2017	680,801	N/A	92,740	773,541
2018	2,060,536	N/A	557,680	2,618,216
2019	1,623,968	8200	1,065,240	2,697,408
Total	4,891,875	8200	1,735,670	6,635,745

Figure 4-6. Collector/Sorter (CSE) Payouts Over Time (Data Table)

This figure shows the Program's payouts to Collector/Sorters over time.

Incentives to CSEs (millions of dollars)	2015	2016	2017	2018	2019
CSE Payouts	\$0.65	\$1.02	\$0.94	\$1.48	\$1.43

Figure 4-7. Tier 1 Processor Payouts Over Time (Data Table)

This figure shows the Program's payouts to Tier 1 Processors over time.

Incentives to Tier 1 Processors (millions of dollars)	2011 Q3/Q4	2012	2013	2014	2015	2016	2017	2018	2019
Base Plan	\$0.70	\$2.10	\$2.50	\$2.80	\$2.90	\$3.94	\$5.48	\$5.74	\$7.49
Growth Incentive	N/A	N/A	\$0.50	\$0.62	\$0.02	\$0	N/A	N/A	N/A
Total	\$0.70	\$2.10	\$3.00	\$3.42	\$2.92	\$3.94	\$5.48	\$5.74	\$7.49

Figure 4-8. Tier 2 Manufacturer Payouts Over Time (Data Table)

This figure shows the Program's payouts to Tier 2 Manufacturers over time.

Incentives to Tier 2 Manufacturers (millions of dollars)	2013	2014	2015	2016	2017	2018	2019
Base Plan	\$0.17	\$1.19	\$2.43	\$4.44	\$4.73	\$5.72	\$5.63
Growth Incentive	\$0	\$0	\$0.34	\$0.67	N/A	N/A	N/A
Total	\$0.17	\$1.19	\$2.78	\$5.11	\$4.73	\$5.72	\$5.63

Table 4-6. Summary of Throughput and Disposition in Tons Per Year (TPY), 2019 (Accessible Version)

The tables below show the Program's carpet throughput and disposition over time in tons per year, in separate subtables by category.

Subtable 4-6a. Throughput Summary

Tons per Year	Quarter 1 (Beginning of Period)	Quarter 2	Quarter 3	Quarter 4 (End of Period)
Gross Collections – by CSEs	1,678	1,394	1,436	1,522
Gross Collections – Processors	7,969	8,918	9,819	8,335
Total Gross Collections (Sum of Processor + CSEs)	9,647	10,312	11,255	9,858

Subtable 4-6b. Recycled Output Summary

Tons per Year	Quarter 1 (Beginning of Period)	Quarter 2	Quarter 3	Quarter 4 (End of Period)
Recycled Output (reuse, tile recycled, fiber, depoly, calcium carbonate, filler, carcass)	5,525	7,531	8,178	7,769
Recycled Output %	16%	18%	20%	23%
Recycled Output Yield (% conversion GC:RO)	57%	73%	73%	79%

Subtable 4-6c. Inventory—Whole Carpet Plus Processed Summary

Tons per Year	Quarter 1 (Beginning of Period)	Quarter 2	Quarter 3	Quarter 4 (End of Period)
Beginning Inventory	4,054	3,582	3,679	3,582
Ending Inventory	3,474	3,645	4,080	2,238

Subtable 4-6d. Total Diversion Summary

Tons per Year	Quarter 1 (Beginning of Period)	Quarter 2	Quarter 3	Quarter 4 (End of Period)
Reuse*	84	71	119	84
Tile Recycled*	36	98	87	78
Fiber / DePoly*	3,837	5,529	6,084	5,750
PC4*	1,568	1,726	1,888	1,857
Filler*	0	0	0	0
Carcass*	0	107	0	0
Kiln	0	9	0	0
CAAF	0	0	1	0
WTE	0	0	0	0
Exports	234	0	0	0
Carpet Cushion/Pad	914	1,095	1,209	1,027

*Included in Recycled Output.

Subtable 4-6e. Out-of-State and Disposal Summary

Tons per Year	Quarter 1 (Beginning of Period)	Quarter 2	Quarter 3	Quarter 4 (End of Period)
Out-of-State	1,799	1,632	1,651	1,421
Disposal: Waste to Landfill	2,635	1,794	1,712	1,895
Disposal: Incineration	0	0	0	0

Figure 4-9. Change in Recycled Output, 2018 versus 2019 (Data Table)

This figure shows the change in Recycled Output (RO) over time, including the increase, decline, and net gain for 2019.

Recycled Output (millions of pounds)	Base	Change	Total
2015 Total Recycled Output	34.8	0	34.8
2016 Total Recycled Output	37.7	0	37.7
2017 Total Recycled Output	47.2	0	47.2
2018 Total Recycled Output	49.3	0	49.3
2019 Decline in Recycled Output	38.4	11.0	38.4
2019 Increase in Recycled Output	38.4	19.7	38.4
2019 Total Recycled Output	58.0	0	58.0

Figure 5-1. California Carpet Sales Over Time (Data Table)

This figure shows the change over time in carpet sales in California, percent declines in sales, and rising assessment costs.

Trends	2013	2014	2015	2016	2017	2018	2019
Carpet Sold, in square yards	100.5	98.9	96.9	94.1	90.4	86.0	80.6
Change in Sales, %	N/A	-1.6%	-2.0%	-2.9%	-4.0%	-4.8%	-6.3%
Assessment, in dollars per square yard	\$0.05	\$0.05	\$0.10	\$0.20	\$0.25	\$0.25	\$0.35

Figure 5-2. Performance Over Time for Gross Collection and Recycled Output (Data Table)

This figure shows the change over time in Gross Collection of carpet and Recycled Output.

Category (millions of pounds)	2012	2013	2014	2015	2016	2017	2018	2019
Gross Collected	111.8	107.2	123.1	103.0	107.2	98.0	93.5	82.1
Recycled Output	36.0	44.1	43.4	34.8	37.7	47.2	49.3	58.0

Figure 5-3. Reported Reuse Over Time (Data Table)

This figure shows the change over time in total reuse of post-consumer carpet.

Category (millions of pounds)	2012	2013	2014	2015	2016	2017	2018	2019
Total Reused PCC	0.15	0.03	0.17	0.61	0.93	0.41	0.73	0.72

Figure 5-4. Energy Recovery Over Time (Data Table)

The figure shows the change over time in total energy recovery from materials disposed as Carpet As Alternative Fuel (CAAF), Kiln, and Waste to Energy (WTE).

Category (millions of pounds)	2015	2016	2017	2018	2019
Total Energy Recovery	29.73	21.02	11.73	1.83	0.02

Figure 5-5. Percent of Gross Collections Converted to Recycled Output (Yield) (Data Table)

The figure shows the change over time in Yield, the percentage of Gross Collection converted to Recycled Output.

Gross Collection to Recycled Output (%)	2011 Q3/Q4	2012	2013	2014	2015	2016	2017	2018	2019
% Converted	24.5%	32.2%	41.1%	35.3%	33.8%	35.1%	48.2%	52.7%	70.6%

Figure 5-6. Reported Percent Fiber by Type in Gross Collections Over Time (Data Table)

The figure shows the change over time in reported Gross Collection by fiber type.

Fiber Percentage	2011 Q3/Q4	2012	2013	2014	2015	2016	2017	2018	2019
Nylon 6	40%	36%	29%	25%	26%	25%	26%	24%	26%
Nylon 6,6	24%	25%	26%	23%	21%	20%	15%	12%	13%
Polypropylene	6%	8%	9%	12%	7%	9%	9%	10%	8%
PET	22%	25%	30%	32%	40%	39%	43%	48%	49%
Wool	0%	0%	0%	0%	0%	0%	1%	1%	0%
Other/Mixed Fibers	8%	5%	6%	7%	6%	8%	6%	6%	4%

Figure 5-7. Calcium Carbonate (PC4) Pounds Over Time (Data Table)

The figure shows the change over time in post-consumer carpet calcium carbonate (PC4).

Category (millions of pounds)	2015	2016	2017	2018	2019
Calcium Carbonate	0.06	2.41	10.54	12.57	14.08

Figure 5-8. Gross Collection Rate and Recycling Rate Over Time (Data Table)

The figure shows the change over time in Gross Collection Rate and Recycling Rate (Recycled Output), including tile reuse, broadloom reuse, tile recycled, fiber, depoly, filler, carcass, and calcium carbonate (PC4).

Percent of Total Discarded	2012	2013	2014	2015	2016	2017	2018	2019
Gross Collection	31%	29%	34%	30%	31%	29%	29%	27%
Recycling Rate	10%	12%	12%	10%	11%	14%	15%	19%

Figure 5-9. Recycled Output Components (Data Table)

The figure shows the components of Recycled Output by pounds and percentage.

Recycled Output Categories	2019 Pounds	2019 Percentage
Fiber	42,399,898	73.1%
PC4	14,076,731	24.3%
Tile Recycled	599,326	1.0%
Reuse	716,819	1.2%
DePoly	0	0.0%
Filler	0	0.0%
Carcass	214,303	0.4%
Total Recycled Output	58,007,077	100%

Figure 5-10. Carpet Tile Recycled (Data Table)

The figure shows the change over time in carpet tile recycled in millions of pounds.

Category (millions of pounds)	2012	2013	2014	2015	2016	2017	2018	2019
Carpet Tile Recycled	0.34	0.31	0.72	0.86	1.12	0.87	0.47	0.60

Figure 5-11. Disposal Over Time (Discards Minus Recycled Output) (Data Table)

The figure shows the change over time in disposal, measured as carpet Discards minus Recycled Output.

Category (millions of pounds)	2015	2016	2017	2018	2019
Discards	345.20	342.79	337.75	321.59	303.84
Recycled Output	34.82	37.65	47.24	49.31	58.01
Disposal	310	305	291	272	246

Figure 5-12. Estimated Greenhouse Gas Emissions Reductions (Data Table)

The figure shows the change over time in estimated greenhouse gas (GHG) emissions reductions, in metric tons of carbon dioxide equivalent, associated with carpet recycling.

GHG Emissions (MTCO₂E)	Baseline 2011–2012	2017	2018	2019
Greenhouse Gas Emissions	-24,926	-49,178	-58,029	-70,118

Figure 5-13. Greenhouse Gas Emissions Reductions for 2019: Equivalency Results for 70,117.56 Metric Tons CO₂E (Data Table)

This figure shows a screenshot of the results of USEPA's greenhouse gas equivalency calculator for 70,117.56 MTCO₂E as calculated in WARM; results are provided below.

Greenhouse Gas Emissions Equivalencies	Number	Category
Passenger vehicles driven for one year	15,148	Emissions
Miles driven by an average passenger vehicle	173,988,983	Emissions
Gallons of gasoline consumed	7,889,902	Emissions
Gallons of diesel consumed	6,887,776	Emissions
Pounds of coal burned	77,259,932	Emissions
Tanker trucks' worth of gasoline	928	Emissions
Homes' energy use for one year	8,091	Emissions
Homes' electricity use for one year	11,871	Emissions
Railcars' worth of coal burned	386	Emissions
Barrels of oil consumed	162,337	Emissions
Propane cylinders used for home barbeques	2,866,386	Emissions
Coal-fired power plants in one year	0.018	Emissions
Number of smartphones charged	8,942,248,238	Emissions
Tree seedlings grown for 10 years	1,159,409	Sequestration
Acres of U.S. forests in one year	91,570	Sequestration
Acres of U.S. forests preserved from conversion to cropland in one year	474	Sequestration
Tons of waste recycled instead of landfilled	23,850	Avoided
Garbage trucks of waste recycled instead of landfilled	3,407	Avoided
Trash bags of waste recycled instead of landfilled	2,983,472	Avoided
Wind turbines running for a year	15.1	Avoided
Incandescent lamps switched to LEDs	2,663,737	Avoided

Figure 5-14. Tier 2 Manufacturer Pounds Shipped and Sold Over Time (Data Table)

This figure shows the change over time in manufacturer pounds of nylon 6 and non-nylon materials shipped and sold.

Material Types (thousands of pounds)	2013	2014	2015	2016	2017	2018	2019
Non-Nylon	1,379	9,880	11,786	17,743	18,816	21,581	19,095
Nylon 6	N/A	N/A	N/A	N/A	N/A	3,229	6,984

Figure 5-15. Total FTEs Reported (at year end) (Data Table)

This figure shows the change over time in Full-Time Equivalent jobs attributable to the California Carpet Stewardship Program. Numbers are for Quarter 4 of each year.

Jobs (FTEs)	2013	2014	2015	2016	2017	2018	2019
Jobs at Year-end	127	161	113	136	147	161	169

Figure 5-16. Gross Collection, Recycled Output, Net Diversion, and Process Waste to Landfill Performance Trends (Data Table)

The figure shows the change over time in Gross Collection, Recycled Output, Net Diversion, and Process Waste to Landfill.

Category (millions of pounds)	2012	2013	2014	2015	2016	2017	2018	2019
Gross Collection	111.8	107.2	123.1	103.0	107.2	98.0	93.5	82.1
Sent to Landfill	17.4	23.6	20.3	22.4	21.2	19.4	23.2	16.1
Net Diversion	94.3	83.7	102.8	80.6	86.0	78.6	70.4	66.1
Recycled Output	36.0	44.1	43.4	34.8	37.7	47.2	49.3	58.0

Table 5-10. Highest Recyclability Criteria: CARE Composite Results with Weighting (Data Table)

For improved this accessibility, this table is split into two sections: Table 5-10a covers criteria for carpet materials and Table 5-10b covers markets available for products. (Note that “Res” means Residential, and “Com” means Commercial.)

Table 5-10a. Highest Recyclability Criteria—Materials: CARE Composite Results with Weighting (Data Table)

Highest Recyclability Criteria	Weight	N6 (Res)	N6,6 (Res)	PET (Res)	PTT (Res)	PP (Res)	Wool (Res)	PC4	Tile N6 (Com)	Tile N6,6 (Com)	Broad loom N6 (Com)	Broad loom N6,6 (Com)	Broad loom Wool (Com)
Ease of deconstruction*	15	105	105	105	105	105	105	75	150	150	30	30	105
Safely recycle all layer similar or higher material performance*	15	60	150	150	60	105	60	75	150	150	75	75	60
Cost-effectiveness*	10	50	100	20	10	10	40	20	80	80	10	10	40
Energy-saving*	5	20	25	45	45	45	45	10	45	45	20	20	45
Identification of resin type*	5	50	50	50	50	50	45	50	45	45	45	45	45
Extent of subsidy required	10	40	100	20	20	40	0	20	100	100	30	30	0
Reusability	5	10	10	0	0	0	15	5	50	50	15	15	15

Table Notes: *Items referenced by AB 1158.

Table 5-10b. Highest Recyclability Criteria—Markets: CARE Composite Results with Weighting (Data Table)

Highest Recyclability Criteria	Weight	N6 (Res)	N6,6 (Res)	PET (Res)	PTT (Res)	PP (Res)	Wool (Res)	PC4	Tile N6 (Com)	Tile N6,6 (Com)	Broad loom N6 (Com)	Broad loom N6,6 (Com)	Broad loom Wool (Com)
a. Closed-loop recycle back into carpet	10	100	0	0	30	0	0	0	100	100	0	0	0
b. Non-carpet closed-loop (recycled multiple times)	10	30	60	60	60	60	0	30	100	100	0	0	0
c. Downcycled (one-time)	10	50	40	40	50	40	0	90	0	0	0	0	0
Volume available	5	30	15	15	5	15	0	45	35	20	20	20	0
Total of Criteria for Materials and Markets	100	545	655	505	435	470	310	420	855	840	245	245	310

Table Notes: Highest Recyclability v12 7-07-18 (also appears as Table 6 on page 116 of the 2018–2022 Plan).

Figure 6-2. Product Output Categories (Data Table)

The figure shows the categories of Product Output by pounds and percentage.

Product Output Categories	2019 Pounds	2019 Percentage
Underlayment/Felts	9,910,140	23.8%
Building Materials	506,174	1.2%
GeoTextiles	2,802,128	6.7%
Thermoplastic Pellets	10,733,861	25.7%
PC4 (calcium carbonate)	14,076,731	33.8%
Miscellaneous	3,663,350	8.8%
Total	41,692,384	100%

Figure 7-1. Program Remittances, Expenditures, and Balance Over Time (Data Table)

The figure shows the income, expenses, fund balance, and reserve (portion of fund balance) for each of the four quarters of 2019.

Category (millions of dollars)	Q1 2019	Q2 2019	Q3 2019	Q4 2019
Income	\$6.4	\$7.4	\$7.6	\$6.8
Expenses	\$5.5	\$4.8	\$6.5	\$7.1
Fund Balance	\$16.2	\$18.8	\$20.0	\$19.7
Reserve (Portion of Fund Balance)	\$3.7	\$3.2	\$4.3	\$4.8

Figure 7-2 and Figure 7-3. Total Program Expenses, by Dollars and Percentages, 2018 and 2019 (Data Table)

These figures show the breakdown of Program expenses by category in both dollar amounts and percentages for 2018 and 2019.

Program Expense (millions of dollars)	2018 \$	2018 %	2019 \$	2019 %
Advisory Committee	\$0.0	0.2%	\$0.0	0.1%
Education & Outreach	\$1.0	5.4%	\$1.1	4.7%
Collections Program	\$0.9	5.1%	\$1.1	4.7%
Grants	\$0.8	4.2%	\$3.9	16.1%
Technical Assistance	\$0.7	3.7%	\$1.1	4.6%
CalRecycle Fees	\$0.4	2.1%	\$0.5	2.1%
CARE Admin Costs (Office)	\$0.0	0.2%	\$0.0	0.1%
Direct Expenses (CARE)	\$0.7	3.8%	\$0.8	3.4%
Direct Support (CARE)	\$0.6	3.0%	\$0.3	1.2%
Accounting & Legal	\$0.5	2.6%	\$0.5	2.2%
Subsidy Payouts (accrual)	\$12.9	69.7%	\$14.6	60.8%

Figure 7-4. Program Expenditure Ratios (millions), 2019 (Data Table)

The figure shows the categories of Program expenditures by dollars and percentage.

Expense Category (millions of dollars)	2019 Dollars (in millions)	2019 Percentage
Program Expenses	\$7.24	30.2%
Administrative Expenses	\$2.16	9.0%
Subsidy Payouts	\$14.56	60.8%
Total	\$23.96	100%

Figure 7-5. Summary of Subsidy Funds Paid to Participants Over Time by Type (Data Table)

The figure shows the change over time in subsidy funds paid to participants by participant and payout type.

Payout Type (dollars in millions)	2011 Q3/Q4	2012	2013	2014	2015	2016	2017	2018	2019
CSE Payout	N/A	N/A	N/A	N/A	\$0.65	\$1.02	\$0.94	\$1.48	\$1.43
Tier 1 Processor Payout	\$0.70	\$2.10	\$3.00	\$3.42	\$2.92	\$3.94	\$5.48	\$5.74	\$7.49
Tier 2 Manufacturer Payout	N/A	N/A	\$0.17	\$1.18	\$2.78	\$5.11	\$4.73	\$5.72	\$5.63
Total	\$0.70	\$2.10	\$3.17	\$4.60	\$6.35	\$10.06	\$11.15	\$12.93	\$14.56

Table 7-1. Pounds and Subsidies Paid by Type (Budgeted & Actual) (Accessible Version)

This table shows pounds and subsidies paid, both budgeted and actual. For accessibility, this table is split into three sections by type: Table 7.1a shows Collector/Sorters (CSE); Table 7-2b shows Processors; and Table 7-2c shows Manufacturers, along with the total payouts for all three types.

Table 7-1a. Pounds and Subsidies Paid by Type (Budgeted & Actual), for Collector/Sorters (CSE)

Subsidy	Pounds Actual	Pounds Budgeted	Delta	Subsidies Paid	Subsidies Budgeted	Delta
CSE Reporting Incentive	N/A	N/A	N/A	\$52,000	\$48,000	\$4,000
Tile Recycled or Reuse SUBSIDY PILOT	1,532,425	1,278,975	253,450	\$76,621	\$63,949	\$12,673
Tile REUSE	593,353	533,755	59,598	\$59,335	\$53,376	\$5,960
Broadloom REUSE	123,466	875,512	-752,046	\$12,347	\$87,551	-\$75,205
Broadloom Recycling Collected, Sold and Shipped	61,612,559	104,015,219	-42,402,660	\$1,232,251	\$2,080,304	-\$848,053
Adjustments	N/A	N/A	N/A	\$0	\$0	\$0
Total All CSEs	63,861,803	106,703,461	-42,841,658	\$1,432,554	\$2,333,179	-\$900,625

Table 7-1b. Pounds and Subsidies Paid by Type (Budgeted & Actual), for Processors

Subsidy	Pounds Actual	Pounds Budgeted	Delta	Subsidies Paid	Subsidies Budgeted	Delta
Tile RECYCLED	599,326	540,198	59,128	\$59,933	\$54,020	\$5,913
Type 1 Standard	42,399,898	46,659,167	-4,259,269	\$4,239,990	\$4,665,917	-\$425,927
Total Type 1	42,999,224	47,199,365	-4,200,141	\$4,299,922	\$4,719,937	-\$420,014
Type 2 Filler/Other	0	0	0	\$6,429	\$0	\$6,429
PC4 (Calcium Carbonate)	14,076,731	19,931,221	-5,854,490	\$2,393,044	\$3,388,308	-\$995,263
Total Type 2	14,076,731	19,931,221	-5,854,490	\$2,399,473	\$3,388,308	-\$988,834
Highest Recyclability: Nylon (6 & 6,6)	15,900,714	8,122,834	7,777,880	\$795,036	\$406,142	\$388,894
Adjustments	N/A	N/A	N/A	\$0	\$0	\$0
Total All Processors	57,075,955	75,253,420	-18,177,465	\$7,494,431	\$8,514,386	-\$1,019,954

Table 7-1c. Pounds and Subsidies Paid by Type (Budgeted & Actual), for Manufacturers

Subsidy	Pounds Actual	Pounds Budgeted	Delta	Subsidies Paid	Subsidies Budgeted	Delta
Non-Nylon Payouts	19,095,006	21,488,652	-2,393,646	\$4,778,151	\$5,355,973	-\$577,822
Nylon 6 Payouts	6,983,509	8,122,835	-1,139,326	\$698,351	\$812,284	-\$113,933
Nylon 6,6 Payouts	1,537,138	0	1,537,138	\$153,714	\$0	\$153,714
Adjustments	N/A	N/A	N/A	\$0	\$0	\$0
Total All Manufacturers	26,078,515	29,611,487	-3,532,972	\$5,630,215	\$6,168,256	-\$538,041
TOTAL SUBSIDY PAYOUTS: ALL TYPES	147,016,273	211,568,368	-64,552,095	\$14,557,201	\$17,015,821	-\$2,458,620

Table 7-2. Total Program Expenses in 2019 (Accessible Version)

This table shows program expenses (exp.) in thousands of dollars, including subsidy payouts, Program expenses (Pgm. or P), and administrative (Admin. or A) expenses.

Program Expense (in thousands of dollars)	Q1	Q2	Q3	Q4	2019 Total	% of Total Expenses	Budgeted Exp.	Delta Budget vs Actual
Subsidy Payouts (accrual)	\$2,917	\$3,716	\$4,160	\$3,764	\$14,557	60.8%	\$18,055	-\$3,498
Advisory Committee (P)	\$4	\$1	\$7	\$0	\$13	0.1%	\$45	-\$32
Education & Outreach (P)	\$376	\$196	\$298	\$259	\$1,128	4.7%	\$1,300	-\$172
Collections Program (P)	\$179	\$227	\$302	\$419	\$1,127	4.7%	\$1,840	-\$713
Grants (P)	\$1,182	\$98	\$747	\$1,839	\$3,866	16.1%	\$5,000	-\$1,134
Technical Assistance (P)	\$314	\$157	\$431	\$203	\$1,105	4.6%	\$1,440	-\$335
Subtotal Program Expenses (P)	\$2,055	\$678	\$1,785	\$2,721	\$7,239	30.2%	\$9,625	-\$2,386
CalRecycle Fees (A)	\$95	\$95	\$108	\$196	\$494	2.1%	\$1,125	-\$631
CARE Office Admin. Costs (A)	\$7	\$6	\$7	\$7	\$26	0.1%	\$148	-\$122
Direct Expenses – CARE (A)	\$172	\$197	\$195	\$262	\$826	3.4%	\$938	-\$112
Direct Support – CARE (A)	\$90	\$76	\$66	\$56	\$288	1.2%	\$869	-\$581
Legal & Accounting (A)	\$212	\$43	\$143	\$131	\$529	2.2%	\$421	\$109
Bad Debt (A)	\$0	\$0	\$0	\$0	\$0	0.0%	\$0	\$0
Subtotal Admin Expenses (A)	\$575	\$418	\$519	\$651	\$2,164	9.0%	\$3,501	-\$1,337
Subtotal Pgm. & Admin. Exp.	\$2,630	\$1,096	\$2,305	\$3,372	\$9,403	39.2%	\$13,126	-\$3,723
TOTAL Expenses	\$5,547	\$4,812	\$6,465	\$7,136	\$23,960	100.0%	\$31,181	-\$7,221

10.7 List of Manufacturers of Products Containing PCC Recycled Materials

Table 10-3 lists the California vendor/manufacturer names and products or product categories that include post-consumer recycled carpet materials.

Table 10-3. California Vendors/Manufacturers Using PCC in Recycled-Content Products, 2019

#	Company	State	Product Name(s)	Products
1	Circular Polymers	CA	PET Pellets	1
2	GC Products	CA	Glass FiberReinforced Cement (GFRC) LEDGE Shower Niche	1
3	Green Hive Group	CA	AbsorbsWell (PC4)	1
4	Reliance Carpet Cushion	CA	Performance 24 oz, 28 oz, 32 oz, 40 oz; Performance Plus 28 oz, 32 oz, 40 oz; Performance Double Stick 28 oz, 32 oz, 40 oz	10
5	SafePath Products	CA	EZ Edge Transitions, CourtEdge Reducers, EntryLevel Landings, GreenSidewalk Repair	4
6	Sierra Mat and Rubber	CA	Mats, Wheel Stops, Smart Pavers	3
7	SwissTrax	CA	Ribtrax Smooth Eco Interlocking Tile Floor	1
8	3B Protection	CA	Quick Assembly Wall Panels, Doors, Construction Blocks, Ready Mix	4
9	Visions Environmental	CA	Stone Miracle, Parking Stops, Retaining Blocks, Landscape Stone Art, Planters, Lightweight Aggregate	6
10	Wetsel Oviatt Recycling	CA	Stormwater Filtration Media	1
N/A	N/A	CA	TOTAL PRODUCTS	32

Table 10-4 lists the non-California vendor/manufacturer names and products or product categories that include post-consumer recycled carpet materials.

Table 10-4. Non-California Vendors/Manufacturers Using PCC in Recycled-Content Products, 2019

#	Company	State	Product Name(s)	Products
1	American Fiber Cushion	GA	Fortitude Cushion Products: 20, 24, 28, 32, and 40 ounces; Matrix Cushion Products: 5, 6, and 8 pounds	8
2	Aquafil-Phoenix	AZ	Nylon 6 pellets	1
3	Bonded Logic	AZ	UltraTouch Denim Insulation, UltraTouch Radiant Barrier, UltraTouch Multi-Purpose Rolls	3
4	CarpetCycle	NJ	Quiet-Tech Insulating and Acoustic Products: 1, 1.5, 2, and 2.5-inch thickness	4
5	Chasen	NJ	Insulation	1
6	Columbia Recycling	GA	Nylon Pellets	1
7	GeoHay	SD	Erosion Control Wattles, Various Lengths: 9, 12, 15, and 18-inch thickness	4
8	Leggett & Platt	TX	Underlayment: Fibertek	1
9	Interface Carpet Tiles	GA	Carpet Tile Product Lines: Cartera, Equal Measure, Human Nature, Lateral Narratives, Near and Far Net Effect, Peitra, Urban Retreat, Viewpoint II	8
10	Manassas Polymers	GA	Nylon Pellets	1
11	Miura Board	TX	Board Decking, Sheets, Siding	3
12	MP Global Products	NE	Insulayment, QuietWalk, QuietWalk LV, QuietWalk Plus	4

#	Company	State	Product Name(s)	Products
13	San Pallets	OH	End Caps, Polymer Stamping Pallet	2
14	Sustainable Polymers	FL	Nylon Pellets	1
15	Wellman Advanced Materials	OH	Nylon 6, Nylon 6,6, and Polypropylene Pellets	3
N/A	N/A	non-CA	TOTAL PRODUCTS	45

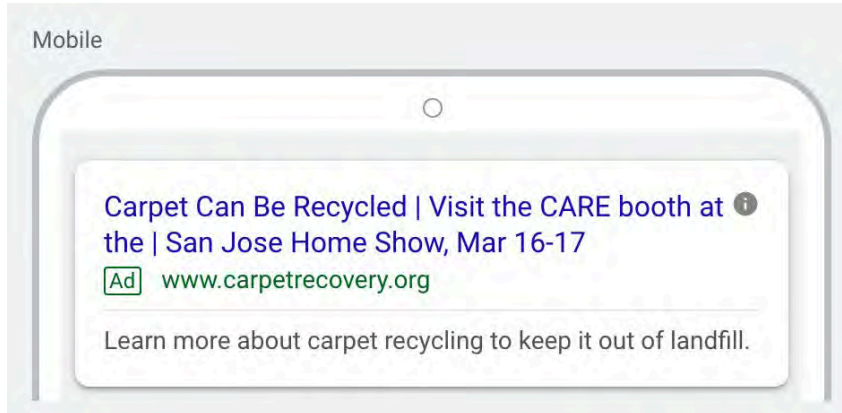
10.8 Samples of Education and Outreach

Throughout 2019, CARE staff and contractors conducted Program marketing, education, and outreach to multiple audiences.

The following attachments show a sampling of these materials:

- **Consumer outreach**, including digital advertisements, newspaper inserts, newspaper ads, and magazine ads, in English and Spanish.
- **Drop-off site support**, including carpet recycling signs in multiple languages.
- **Retailer outreach**, including a service option outreach binder and point-of-sale brochure.
- **Installer outreach** in multiple languages and advertising in industry journals.
- **Local government outreach**, including a program overview, presentation to the California Resource Recovery Association (CRRA), and other local government resources on the CARE website.
- **Market development** materials, including a guide to products made from recycled carpet, a brochure of recycled carpet-derived products, information on grants and micro-grants.
- **E-News** sent monthly to interested stakeholders and Program participants.
- **Blog posts** on timely topics related to carpet recycling in California.
- **Events**, including local home and garden shows.
- **Twitter** updates on Program-related news items and activities.
- **Videos**/public service announcements (PSAs) on carpet reuse and recycling.

Consumer Outreach



Digital Ad for San Jose Home Show



Sacramento Bee Ad for Sacramento Home and Garden Show



Newspaper Insert – Cover

Cleaning up? Do it the Right Way

California is leading the way in recycling unwanted items and keeping them out of landfills

by Matt Jocks



You have decided to embark on that springtime cleaning or renovation project, and you know what the first step must be: confronting all that stuff you no longer need.

Whether it's the old mattress up against the wall of the garage, the half-empty paint cans under the workbench, the batteries you have bagged up or the carpeting you replaced, it has got to go.

But it has got to go the right way.

While you may not have a use for these old items, they contain materials that can be reused in valuable and surprising ways. Dumping them in the trash or elsewhere may seem like the easiest option, but there are costs and potential health risks in doing so.

That's why the California State Legislature has passed laws aimed at keeping these types of items out of landfills. These laws — some of which were the first in the nation — have necessitated several industry-led product stewardship groups that manage four products that, in many cases, can be spared from the landfill: paint, batteries, mattresses and carpeting.

Improper disposal of each of these products carries its own negative impacts.

"California considers leftover latex and oil-based paints hazardous wastes that are prohibited from disposal in landfills," said Jeremy Jones, PaintCare's West Coast program manager. "PaintCare relieves the burden for those who find themselves with leftover paint by setting up convenient sites to get rid of it — usually at nearby paint and hardware stores."

In the case of batteries, improper disposal carries the risk of fires from batteries that may appear dead but still pack plenty of energy. In fact, 65 percent of fires reported by 26 waste facilities in California were said to have been caused by batteries.

For bulky carpets and mattresses, the cost is mostly landfill space and the waste of valuable components that could be

turned into new, sometimes unexpected products.

"One of the main products to come from recycling carpets is plastic parts for cars and trucks," said Robert Peoples, executive director of Carpet America Recovery Effort. "You look under the hood of a Ford F-150 and you're looking at about two square yards of carpeting."

Reusing resources also limits the costs, both economic and environmental, of manufacturing products from virgin materials. Those materials, in some cases, are in limited supply.

For all of these products, the fight to reduce the waste of resources and the potential dangers of improper disposal has been an uphill climb. But there has been progress.

Although the Mattress Recycling Council estimates more than 50,000 mattresses hit the landfills each day in the U.S., efforts in California, one of only three states with a mattress recycling program, are paying off.

"We've recycled 3.5 million since the program began," said Mike O'Donnell, managing director for the Mattress Recycling Council. "That's a big achievement and we continue to expand every month."

Although each recycled battery or can of paint is a victory, those involved are also hoping consumers take a bigger view.

"After all these years, you know with an aluminum can, that's something that should go in a different place than the garbage," said Carl Smith, CEO and president of Call2Recycle, Inc. "That's not necessarily the case with batteries. It's a matter of raising awareness and recognition that these items should also be responsibly recycled."

While you may not have a use for these old items, they contain materials that can be reused in valuable and surprising ways.

RECYCLING PROGRAMS HAVE HELPED CALIFORNIANS RECYCLE & MANAGE*



16 million gallons of paint



15 million pounds of batteries



3.5 million mattresses



500 million pounds of carpet

*Since the inception of each program

2 | [Cleaning Up?](#) | Product Stewardship | A Special Advertising Supplement

Newspaper Insert – Page 2

So, What Do I Do With This Stuff?

by Matt Jocks



PAINT

What's accepted

- Interior/exterior paints (including latex, acrylic, oil- and water-based and enamel)
- Deck coatings and floor paints
- Primers, sealers and undercoaters
- Stains
- Shellacs, lacquers, varnishes, single-component urethanes
- and more (find a full list at paintcare.org)

How to prepare

- Make sure lids are secure and not leaking
- Make sure paints are in original containers with original labels
- Make sure different paints are not combined

Where to take it

- Drop-off locations include paint retailers, transfer stations and household hazardous waste programs

For recycling locations visit paintcare.org



BATTERIES

What's accepted

- Single-use batteries like AAA, AA, 9v, etc. (accepted at select locations)
- Rechargeable batteries (often found in cordless power tools, cellphones and small electronics) are widely accepted

How to prepare

- Separate batteries from other waste and by type
- Tape positive terminals with non-conductive tape (avoid covering label that indicates battery type) or individually bag batteries before dropping off at a participating collection location

Where to take it

- Drop-off sites include participating retailers and household hazardous waste locations
- Mail-back kits available through Call2Recycle

For recycling locations visit call2recycle.org/locator



MATTRESSES

What's accepted

- All mattresses that are relatively clean and have not been significantly exposed to the elements or contain bedbugs

How to prepare

- If transporting with other items, try to minimize damage or contamination of the mattress

Where to take it

- Drop-off locations include participating transfer stations, recycling facilities, landfills, nonprofit organizations or local businesses
- When a purchased mattress is delivered, the retailer is required to offer their customer the option to have an old one picked up (some exceptions apply)

For recycling locations visit byebymattress.com/CA



CARPET

What's accepted

- Wall-to-wall carpet and carpet tile (no area rugs)

How to prepare

- Keep carpet dry and free of debris (tack strips, nails, etc.)
- Roll carpet, separate from pad

Where to take it

- Drop-off locations include participating landfills, transfer stations, and recycling centers throughout the state
- Find locations and requirements online
- Many retailers include takeback/recycling as a part of their installation service — be sure to ask

For recycling locations visit carpetrecovery.org/CA

A Special Advertising Supplement | Product Stewardship | 3

Newspaper Insert – Page 3

A Second Life for Your Stuff

by Matt Jocks

How unwanted items get turned into something new

Batteries

How are they recycled?

- Alkaline batteries are mechanically separated at room temperature.
- Nickel-cadmium batteries are recycled through a high-temperature process that creates a molten metal bath and solidifies the material, which can then be used in the manufacturing of new products.
- Lithium-ion batteries are discharged and then crushed or shredded with a high-speed hammer before materials like cobalt and nickel are extracted.

What does it become?
End products vary. Alkaline battery material can be used in sunscreen and road asphalt aggregate. Nickel recovered from batteries appears in silverware and golf clubs. Materials from lithium-ion batteries can be used in new stainless steel products and batteries.



Mattresses

How are they recycled?

- Mattresses are cut open and the layers are separated.
- Interior materials are sorted. Soft materials are compressed and baled.
- Steel from box springs are extracted and wood is chipped.

What does it become?
About 80 percent of a mattress can be recycled. The foam padding can be used in carpeting or for sound acoustic material. Cotton and other fibers are used in insulation. Steel springs are baled and sent to scrap dealers, who melt them down for hundreds of products, such as construction rebar. The chipped wood can become biomass fuel or mulch.



Paint

How is it recycled?

- Paints are separated by color and filtered for any solid materials.
- The tint is tweaked by adding pigments.
- Amines and ammonia may be added to obtain proper pH level.

What does it become?
Recycled-content paint is a high-quality commercial product that is sold domestically and internationally. In California, public agencies such as Caltrans use recycled paint on large infrastructure projects.



Carpet

How is it recycled?

- Machines grind the carpeting to separate the carpet fibers from the backing.
- Materials are purified.
- Plastics are extracted from the carpet fibers; rubbers, oils and other material are extracted from the backing.

What does it become?
A variety of products. Plastic from recycled carpet is sold to auto manufacturers, where it is used for plastic casings under the hood. Old carpet materials can also find their way into things like tiles, decking and shingles.



ABOUT THIS PUBLICATION

Whether it's a small button battery or a big roll of carpeting, you know your old stuff has value when it is recycled. Four product stewardship groups — PaintCare, Bye Bye Mattress, Carpet America Recovery Effort and Call2Recycle — have joined forces to create this publication and spread the word. These groups are working with retailers and local agencies to let consumers know where and how to recycle. Now you can do it, too — spread the word and let others know what to do with their unwanted items. **Thanks for reading — now get cleaning!**



California Carpet Stewardship Program
An initiative of CARE, Carpet America Recovery Effort.



call2recycle
Loading the charge for recycling.



paintcare



bye bye mattress
A Program of the Home Recycling Club®

Produced by N&R Publications, www.nrpubs.com 

¿Limpiando?

Desear pintar, baterías, colchones y alfombras viejas es fácil y benéfico para California. Descubre cómo ADEENTRO.

Un suplemento publicitario especial

¿Limpiando? Hágalo de la manera correcta

California es líder en el reciclaje de artículos no deseados y en mantenerlos fuera de los vertederos

Por Matt Lucas

Un día difícil encontrar un personal de limpieza o de mantenimiento y saber qué el primer paso es el más importante y cómo se debe hacer para no estar en un problema cuando se trata de limpiar. La ley de pintura de California es una de las más estrictas en el país y es importante que se haga de la manera correcta. Para el día de hoy, la Ley de Limpieza de Pintura de California requiere que el personal de limpieza y mantenimiento de edificios y negocios debe utilizar un programa de reciclaje de pintura.

Los programas de reciclaje han ayudado a los californianos a reciclar y administrar*

16 millones galones de pintura	15 millones libras de baterías
3.5 millones de colchones	500 millones libras de alfombra

Aunque usted quizá no tenga un uso para estos artículos antiguos, contienen materiales que se pueden reutilizar de maneras valiosas y sorprendentes.

ACERCA DE ESTA PUBLICACIÓN

¿Acerca de esta pequeña batería de botón o un gran rollo de alfombra, usted sabe que son cosas antiguas fuera del tiempo de la mayoría. Estos grupos de tiempo lo ayudarán a encontrar un lugar para reciclarlos correctamente. Este grupo de tiempo lo ayudará a encontrar un lugar para reciclarlos correctamente. Este grupo de tiempo lo ayudará a encontrar un lugar para reciclarlos correctamente.

California Carpet Stewardship Program | call 2 recycle | bye bye mattress | point2care

Entonces, ¿qué hago con estas cosas?

Por Matt Lucas

PINTURA

¿Qué se acepta?

- Pinturas interiores, exteriores (incluyendo de diez, acrílicas, a base de aceite y agua y emulsión)
- Insecticidas y pinturas de color
- Impermeabilizantes y selladores de juntas
- Muebles
- Esmaltes, lacas, barnices, acabados de un solo componente
- Ados (incluyendo una tinta conductora en pintura orgánica)

¿Cómo prepararlos?

- Mezclarlos de que los recipientes estén bien cerrados y que no tengan fugas
- Mezclarlos de que los recipientes estén bien cerrados y que no tengan fugas

¿Dónde llevarlos?

- Los recipientes de pintura, incluidos los recipientes de pintura, deben ser llevados a un programa de reciclaje de pintura.

BATERÍAS

¿Qué se acepta?

- Baterías de un solo uso como AAA, AA, C, D, etc., (incluyendo un líquido alcalino)
- Las baterías recargables (incluyendo las usadas en herramientas eléctricas, aparatos electrónicos y dispositivos electrónicos portátiles que funcionan con baterías).

¿Cómo prepararlos?

- Las baterías recargables deben estar completamente cargadas y los terminales deben estar bien aislados.

¿Dónde llevarlos?

- Las baterías deben ser llevadas a un programa de reciclaje de baterías.

COLCHONES

¿Qué se acepta?

- Todos los colchones que estén completamente limpios y que no hayan sido significativamente dañados o que estén deteriorados.

¿Cómo prepararlos?

- El colchón debe estar limpio y seco.
- El colchón debe estar bien enrollado y protegido con plástico.

¿Dónde llevarlos?

- Los colchones deben ser llevados a un programa de reciclaje de colchones.

ALFOMBRA

¿Qué se acepta?

- Alfombra de pared a pared y alfombra de alfombra con tapete.

¿Cómo prepararlos?

- Separar la alfombra seca y limpia de la alfombra con tapete.
- Dividir la alfombra en pedruzcos de tamaño de mano.
- Mezclar los pedruzcos de alfombra con tapete.

¿Dónde llevarlos?

- Las alfombras deben ser llevadas a un programa de reciclaje de alfombras.

Un suplemento publicitario especial | Manejo de productos |

Una segunda vida para sus objetos

¿Cómo se convierten los artículos no deseados en algo nuevo?

Baterías

¿Cómo se reciclan?

- Los colchones se abren y los coques se separan.
- Los materiales internos se clasifican.
- Los materiales internos se comprimen y se envían.
- El acero de los rollos se envía a la fundición de acero.

¿En qué se convierten?

Alrededor del 90 por ciento de un colchón se puede reciclar. La mayoría de los materiales se reciclan en acero y otros productos. El acero de los rollos se envía a la fundición de acero para fabricar nuevos productos, como varillas de construcción. La mayoría de los materiales se reciclan en acero y otros productos.

Alfombra

¿Cómo se recicla?

- Las alfombras se separan en fibras y lana.
- Las fibras se reciclan en fibra de vidrio o se envían a la fundición de acero.
- La lana se recicla en lana reciclada o se envía a la fundición de acero.

¿En qué se convierten?

Una variedad de productos. El plástico de la alfombra reciclada se vende a los fabricantes de alfombras, donde se utiliza para fabricar de plástico tipo de alfombra. Los materiales de alfombras viejas también pueden transformarse en cosas como alfombras, alfombras, alfombras y alfombras.

ACERCA DE ESTA PUBLICACIÓN

California Carpet Stewardship Program | call 2 recycle | bye bye mattress | point2care

Newspaper Insert – Spanish



The star magnolia, *Magnolia stellata*, offers glistering beauty and a fragrance that goes unatched.

FROM PAGE 9C

MAGNOLIA

is happening in the Southeast, a wide geographic range can grow there as they are cold hardy in zones 4-9. These palm and larger plants are arriving at our garden centers now waiting for you to adopt them and find a home in your landscape.

If you look at the internet and see the number of varieties in the marketplace you will be amazed. I assure you, you will not find this many selections at your garden center. You will find a good number however and now is the time to start shopping. Visit those certified nurseries in your area that specialize in great woody ornamentals. When you decide to plant, choose a site that is fertile, well-drained, moist and ideally offers wind protection. Dig the hole three to five times as wide as the root ball, but no deeper. The top of the root ball should be even with the soil profile. You may ask yourself why

we always suggest the hole be wide. This allows for the easiest and quickest root expansion and thus good establishment in your landscape.

The height of these magnolias varies with the cultivar and will range from 15- to 20 feet. Space them 15- to 20 feet apart or from other nearby blooming trees. The flowers border on the spectacular with color, shape, size and intoxicating fragrance. The large, fuzzy buds also offer unique texture in the winter garden.

The early spring or late winter garden can truly look like a painting if you include a clematis or Chinese magnolia, or star magnolia with other bloomers like Taiwan cherry, camellias, forsythia, and early blooming narcissus. With the addition of plants like these, your spring will seem to be extended as the azaleas, dogwoods, and red-buds quickly follow.



An assortment of Jake Castro's wooden earrings on display in his studio. Castro studied public art and printmaking at the School of the Art Institute in Chicago.

FROM PAGE 9C

ARTIST

Marked. He said he enjoys being engaged with people and feeling connected with Sacramento. He has noticed his following growing over the years. "It's nice to see people walking around the city with my goods on," he said. "Every once in a while I have somebody stop by my booth [and say] that they bought my wares 1 1/2 years ago, and they pull it out and say, 'This is the best wall I've ever bought before.' That's a really nice feeling."

Castro credits his producer's longevity to his use of natural, quality materials that are locally sourced: the cow hide he uses in his leather work comes from a wholesale provider out of Natoma, and the variety of wood he uses comes from Sacramento.

Castro said he is developing some new products

as well as working another project with local and locally — the details, for now, are hush-hush. But he doesn't see that aspect of his work slowing down any time soon, since so many people enjoy it. "Don't be surprised if some new Sacramento-area murals pop up as well. Castro is passionate about public artwork."

"I like the raw aspect of it. While you're working, people are walking by, they can see the entire process. There is no secret behind how it's being made," he said. "Also, the thing about public art is you're giving back to the community. You're just beautifying this space. ..."



Jake Castro displays leather bag designs in his studio.

And it's free for everyone else [to see]."

FIND JAKE CASTRO
Shop: You can find Jake Castro's products online at jakecastro.com, as well as Old Gold in Midtown, DISPLAY in Oak Park, La Belle Vie in Roseville and every Saturday at the

Midtown Farmers Market. Learn more: Castro also teaches introduction to laser cutting classes at the Hacker Lab, typically every first and third Wednesday from 6-8 p.m. sacramento.hackerlab.org/en/events.

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- To find a carpet collection site in your area, visit CarpetRecovery.org/CA

California Carpet Stewardship Program
An initiative of CARE Labels America's Best Carpet

Going to the Sacramento Home & Garden Show at Cal Expo this weekend? Visit CARE at booth #423, Building B.

1/4 Page Ad in Sacramento Bee Promoting Home and Garden Show

Consumer Outreach – Newspaper Ads

Sacramento Bee Ad for Sacramento Home and Garden Show

Home & Garden

THE SACRAMENTO BEE

WEDNESDAY



The star magnolia, *Magnolia stellata*, offers glistering beauty and a fragrance that goes unmatched.

MAGNOLIA

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California Carpet Stewardship Program
An Initiative of CARPET RECOVERY INTERNATIONAL

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Scientists watching for Barry's damage

John Swisher
ARIZONA

Hurricane Barry could affect the environment of the Gulf coast and Lower Mississippi Valley in numerous ways, these accelerating, runoff of harmful nutrients to tipping trees and damage to wildlife habitat and fisheries, says this say.

But the extent of the damage – and whether it will be at least partially offset by benefits such as a disruption of the northern Gulf of Mexico “dead zone” – is hard to predict, they say. That’s because the region has a rare one-two-three punch: the state’s unique coastal dune and terrestrial dune flora, combined with recent high water levels in the Mississippi River.

“We don’t know how the system is going to respond to all this because it’s so unusual,” said Melissa Hunsack, a coastal ecologist with the White Institute of the Gulf in Baton Rouge, Louisiana.

One of the wettest ever springs in the nation’s heartland triggered the Mississippi, sending massive volumes of water westward toward the Gulf. Lewis said dams were breached and millions of acres of cropland flooded in the Midwest. Barry threatened to hit a storm surge of up to 3 feet onto coastal regions. And forecasters said the hurricane could stall inland and dump up to 2 feet of rain.

Dissolved waste from municipal and chemical fertilizers from Midwestern corn and soybean fields into streams, rivers or dunes and eventually the Mississippi. The nutrients – especially nitrogen – overfed aquatic plants that eventually die and decompose, leaving a large section of the Gulf with little or no oxygen each summer. The National Oceanic and Atmospheric Administration predicted that this year’s dead zone will be roughly the size of Massachusetts.

Yet even if this year’s surge displaced area which is smaller than expected, historical data suggests that Barry will flush additional nutrients into the Mississippi and other Gulf tributaries, leading to bigger dead zones in the long run.

The surge of fresh water also endangers oysters, brown shrimp, speckled trout and other fish that require particular salinity levels, said David Math of the National Wildlife Federation’s Gulf Restoration Program.



Quakes shake up talk of Nevada nuclear dump

ASSOCIATED PRESS

LAS VEGAS – Recent California earthquakes that rattled Las Vegas have shaken up arguments on both sides of a stalled federal plan to reembed nuclear waste beneath a long studied site in southern Nevada.

Wyoming Republican Sen. John Barrasso said last week that his legislation to jump-start the process to open the Yucca Mountain project is based on studies that take seismic activity into account, the Las Vegas Review-Journal reported.

“This doesn’t change my view,” Barrasso said. “We need to find a permanent location for the storage of nuclear waste. I think it’s much safer in Yucca Mountain than in a hundred different locations.”

Nevada’s seismic danger, and the 6.4 magnitude and 72 magnitude tremors over the July Fourth holiday appeared to have bolstered arguments by opponents of the radioactive waste repository.

U.S. Rep. Steve Horsford, a Democrat from Las Vegas and a longtime Yucca Mountain skeptic, immediately labeled the second shake “yet another reminder of how dangerous it would be to make Nevada the dumping ground for the nation’s nuclear waste.”

Democratic U.S. Sen. Jacky Franks said the tremors “highlight the very real dangers” the state would face with nuclear waste storage.

U.S. Rep. Steven Horsford, a Democrat whose congressional district includes Yucca Mountain and North Las Vegas, cited a state tally of 62 seismic events greater than magnitude 2.5 within a 25-mile radius of Yucca Mountain during the past 43 years.

“Earthquakes can be dangerous enough in their own right; adding the possibility of a nuclear waste spill in the aftermath is not a risk I am willing to take,” Horsford told the Review-Journal.

Yucca Mountain is about 60 miles northwest of the Las Vegas Strip and 100 miles east of Reno, California, where the Fourth of July earthquake originated. It was designated by Congress in 2002 as the site for the nation’s nuclear waste.

The project was shelved in 2003 under pressure from two Democrats, then Senate Majority Leader Harry Reid of Nevada and President Barack Obama. They said nuclear waste should be locked in a state that wants it. A recent state by state ranking by the U.S. Geological Survey showed Nevada fourth in seismic activity behind Alaska, Wyoming and Oklahoma, and just ahead of California.

Horsford, Franks and Rep. Steve Lyle, a Democrat, were instrumental in keeping colleagues to vote against a spending bill to continue the process to build Yucca Mountain. Republican U.S. Rep. Mark Amodei, the only lawmaker from Nevada on the House Appropriations Committee, voted against that legislation, producing a bipartisan deficit and a large hurdle for the Trump administration and proponents to revive the legal process for developing the Nevada repository next fiscal year.

Did you know that wall-to-wall carpet can be recycled?



Take clean, dry carpet for recycling to:

West Central Landfill – Igo
 14095 Clear Creek Road, Igo
 Monday - Friday, 7:30am - 4:30pm
 Saturday 8:00am - 4:00pm

\$4.25/ton (demo)
 \$20/ton for carpet prepared for recycling.

For more information call 530-396-2555.



NO BARRIERS



Because of you, we're building up communities together.

Organizations in Redding shared their community improvement ideas with A Community Thrives and your donations helped support them.

Read the story now at: redding.com/ctg/2019

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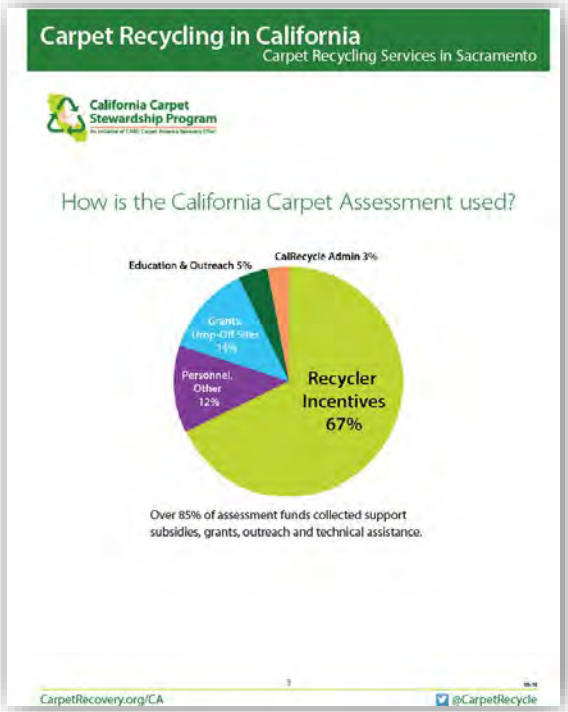
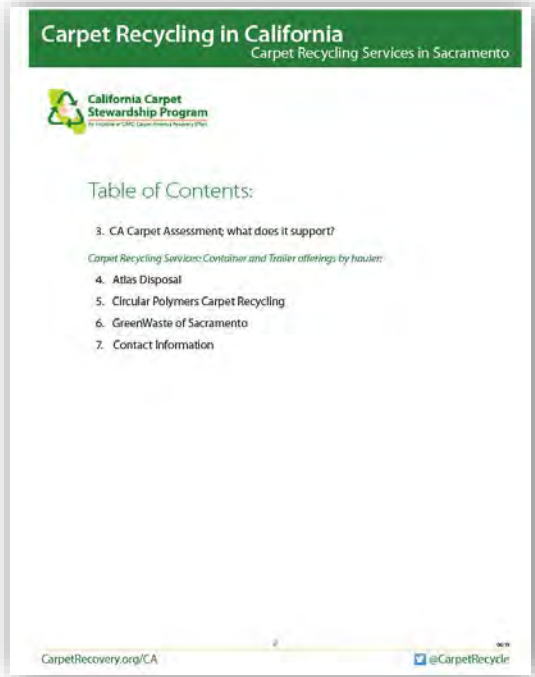
Record Searchlight
 Sunday, July 14, 2019

Drop-off Site Support – Carpet Recycling Signs




Retailer Outreach


Sacramento Retailers: Service Options Outreach Binder (7-page document)



Carpet Recycling in California
Carpet Recycling Services in Sacramento



2. Circular Polymers Carpet Recycling:
53' Tractor Trailer




Circular Polymers Carpet Recycling (continued)
20' Cargo container





CarpetRecovery.org/CA @CarpetRecycle

Carpet Recycling in California
Carpet Recycling Services in Sacramento




3. GreenWaste of Sacramento:
20 cubic yard open-top, covered container
- Actual Dimensions: 16' x 8' x 4.5'
40 cubic yard open-top, covered container
- Actual Dimensions: 21' x 8' x 7.5'

20 cubic yards **40 cubic yards**

CarpetRecovery.org/CA @CarpetRecycle

Carpet Recycling in California
Carpet Recycling Services in Sacramento



Thank you for your recycling efforts in the Sacramento Region. Your efforts are directly helping to divert the 340 million pounds of carpet that go to California landfills every year.

For Northern California CARE questions, please contact:
Lisa Mekis
Senior Associate
lmeakis@CarpetRecovery.org
510-862-6033

CarpetRecovery.org/CA @CarpetRecycle

Retailer Point-of-Sale Brochure



Installer Outreach

Carpet Recycling in California

Stanislaus County



Is Your Carpet Ready for Recycling?

Follow these simple steps to prepare carpet for recycling:

Step 1: Keep it Dry.

Step 2: Keep it Debris Free.
Remove tack strips, nails, trash and dirt

Step 3: Prepare the Carpet.

- Cut carpet into manageable sections
- Separate carpet from pad
- Roll carpet
- Roll, stack or fold carpet pad
- Stack carpet tile

Step 4: Recycle Carpet at:
The New Tin Yard
623 Kansas Ave, Modesto
Mon – Fri 8:00 a.m. – 4:30 p.m.
Sat 8:00 a.m. – 2:00 p.m.
(209) 522-6456

CarpetRecovery.org/CA



Why Recycle Carpet?

More than 340 million pounds of carpet are buried in California landfills every year, where it stays for centuries without breaking down. But there is a better way: recycling.

Recycling carpet saves natural resources, conserves landfill space, and reduces dependency on fossil fuels.

Old carpet can be recycled and made into useful new products, like traffic signs, insulation, new carpet and carpet padding.

In 2010 California passed a Carpet Stewardship law to increase carpet recycling. Since then over 100 million pounds of carpet have been diverted from our landfills and recycled. By working together, we can do more!

This program is supported by Carpet America Recovery Effort (CARE). CARE works to create market-based solutions to increase carpet recycling and divert carpet from landfill.

Thank you for recycling!

08-19

Reciclaje de alfombras en California

Stanislaus County



¿Está su alfombra lista para ser reciclada?

Siga estos pasos simples para preparar alfombras para su reciclaje:

Paso 1: Manténgala seca.

Paso 2: Manténgala libre de desechos.

Retire las tiras con tachuelas, clavos, basura y tierra

Paso 3: Prepare la alfombra.

- Corte la alfombra en secciones fáciles de manejar
- Separe la alfombra de la almohadilla
- Enrolle la alfombra
- Enrolle, apile o doble la almohadilla para alfombra
- Apile las losetas de alfombra modular

Paso 4: Recicle alfombras en:

The New Tin Yard

623 Kansas Ave, Modesto

Lun. – vie. 8:00 a.m. – 4:30 p.m.

Sáb. 8:00 a.m. – 2:00 p.m.

(209) 522-6456

CarpetRecovery.org/CA



¿Por qué reciclar alfombras?

Cada año en rellenos sanitarios de California se entierran más de 340 millones de libras de alfombras, donde permanecen por siglos sin descomponerse. Pero hay una mejor manera: reciclar.

Reciclar alfombras ahorra recursos naturales, conserva espacio en los rellenos sanitarios y reduce la dependencia de combustibles fósiles.

Las alfombras viejas pueden ser recicladas y convertidas en nuevos productos útiles, como letreros de tránsito, aislamiento, alfombra nueva y almohadilla para alfombras.

En 2010 California aprobó una Ley de Administración de Alfombras para aumentar el reciclaje de alfombras. Desde entonces, más de 100 millones de libras de alfombra han sido derivadas de nuestros rellenos sanitarios y recicladas. ¡Trabajando juntos podemos hacer más!

Este programa es apoyado por el Programa de Recuperación de Alfombras de Estados Unidos (Carpet America Recovery Effort o CARE). CARE trabaja para crear soluciones basadas en el mercado para aumentar el reciclaje de alfombras y evitar que las alfombras vayan al relleno sanitario.

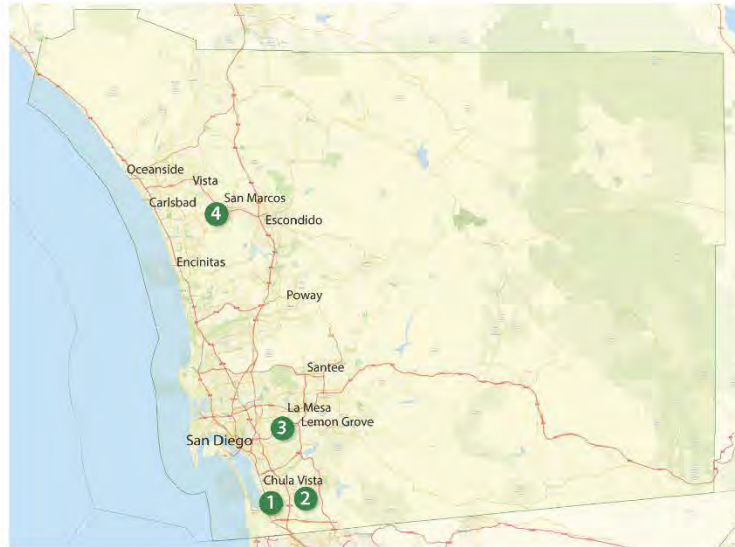
¡Gracias por reciclar!

08-19

Recycle Carpet in San Diego County!

The sites below accept carpet for recycling in San Diego County:

- 1 **Planet Recycling**
187 Mace Street, Chula Vista.
Tel. 619-424-7545
- 2 **Otay Landfill**
1700 Maxwell Road, Chula Vista.
Tel. 619-421-3773
- 3 **SANCO Resource Recovery**
6750 Federal Blvd, Lemon Grove.
Tel. 619-287-7555
- 4 **EDCO San Marcos Construction Demolition Processing Facility**
224 South Las Posas Road, San Marcos.
Tel. 760-744-2700



To see hours and rates, visit CarpetRecovery.org/CA.

04-19

Is Your Carpet Ready for Recycling?

- STEP 1:** Keep it dry.
- STEP 2:** Keep it free of debris. Remove tack strips, nails, trash and dirt.
- STEP 3:** Prepare the carpet.
- ✓ Cut carpet into manageable sections
 - ✓ Separate carpet from pad
 - ✓ Roll carpet
 - ✓ Roll, stack or fold carpet pad
 - ✓ Stack carpet tile
- STEP 4:** Drop off carpet for recycling! (See map on reverse for locations.)



Watch our video (English and Spanish versions) to learn how to prepare carpet and where to take it. Thank you!

CarpetRecovery.org/CA-Installers

Recycle Carpet in the Greater Sacramento Area!

The sites below accept carpet for recycling in the Greater Sacramento Area.

**1 El Dorado Disposal/
Waste Connections**
4100 Throwita Way
Placerville
530-295-2808

**2 Florin Perkins
Public Disposal**
4201 Florin Perkins Rd.
Sacramento
916-443-5120

3 Kiefer Landfill
12701 Kiefer Blvd.
Sloughhouse
916-875-5555

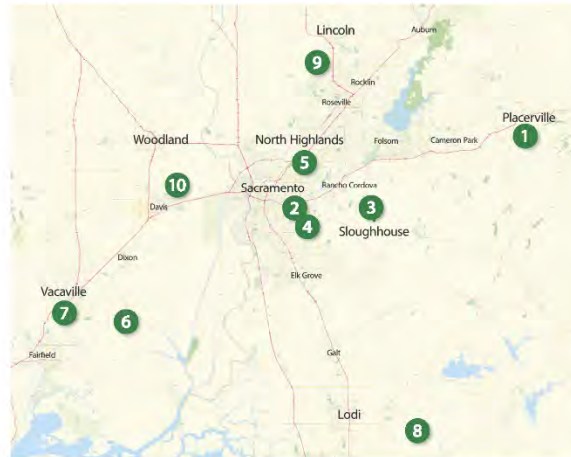
4 L&D Landfill
8635 Fruitridge Rd.
Sacramento
916-383-9420

**5 North Area
Recovery Station**
4450 Roseville Rd.
North Highlands
916-876-9446

6 Recology Hay Road
6426 Hay Rd.
Vacaville
707-678-4718

**7 Recology Vacaville
Solano Recycling Facility**
855 1/2 Davis St.
Vacaville
707-448-2945

**8 North County
Recycling Center**
17720 East Harney Ln.
Lodi
209-887-3868



**9 Western Placer Waste
Management Authority**
3195 Athens Ave.
Lincoln
916-543-3960

**10 Yolo County
Central Landfill**
44090 County Rd. 28H
Woodland
Tel. 530-666-8727

To see hours and rates, visit CarpetRecovery.org/CA.

05-20

Is Your Carpet Ready for Recycling?

STEP 1: Keep it dry.

STEP 2: Keep it free of debris. Remove tack strips, nails, trash and dirt.

STEP 3: Prepare the carpet.

- ✓ Cut carpet into manageable sections
- ✓ Separate carpet from pad
- ✓ Roll carpet
- ✓ Roll, stack or fold carpet pad
- ✓ Stack carpet tile

STEP 4: Drop off carpet for recycling!
See map on reverse for locations.



Watch our video (English and Spanish versions) to learn how to prepare carpet and where to take it. Thank you!

CarpetRecovery.org/CA-Installers

Ad in California Building News – Q3 2019



California Buildings News • Q3 2019

California
**Recycles
Carpet**
with CARE



Carpet CAN Be Recycled

Californians want to know what happens to their old carpet. This bulky material takes up a lot of space in landfills, and stays there, unchanged, for hundreds of years. But carpet can be recycled into useful new products.

Used wall-to-wall carpet and carpet tile can be recycled if prepared properly and brought to the right place.

Visit CarpetRecovery.org/CA to find a drop-off site near you.



Find a
drop-off
site



**California Carpet
Stewardship Program**
An Initiative of CARE: Carpet America Recovery Effort

CarpetRecovery.org/CA

“Healthy” Buildings Get USGBC Leadership Awards

Pacific Region Leadership Award recipients were honored at the Greenerbuilder Conference in San Francisco for projects that promote health and well-being through all phases of development and operation. Report From USGBC...

UC Berkeley Haas School of Business, Chou Hall is a completely student-focused building on the University of California, Berkeley's Haas School of Business campus without any offices—only spaces for instruction and collaboration. Designed for both LEED Platinum and WELL Silver certifications, Chou Hall has also received a TRUE Zero Waste Platinum certification, further demonstrating the school's commitment to promoting both environmental and human health.

The project team used the WELL framework to engage key stakeholders and develop a plan to promote health at the new business school building. By convening a diverse set of stakeholders, the project was able to leverage Berkeley's University Health Services and the School of Business's Haas Wellness Culture Assessment to inform the design and development of Chou Hall. This included aligning with the Haas Wellness Culture Assessment.

(Continued on page 16)



The award-winning Chou Hall has achieved LEED Platinum, WELL Silver and TRUE Waste Platinum certifications. Photo credit: Blake Marvin.

Local Government Outreach

Carpet Recycling in California

Role of Local Government



PROGRAM OVERVIEW FOR LOCAL GOVERNMENT

More than 320 million pounds of carpet are discarded in California landfills every year—carpet that could be recycled into useful new products. Carpet Stewardship Laws (AB 2398 in 2010 and AB 1158 in 2017) were passed by the California legislature to increase the diversion and recycling of carpet in the state. The California Carpet Stewardship Program, administered by the non-profit Carpet America Recovery Effort (CARE), is charged with meeting the requirements for carpet recycling set by this law. In addition, CARE may be helpful to jurisdictions in reaching their AB 939 and AB 341 goals.

How Local Government Can Help

Local government agencies are essential partners for the Program's mission. CARE invites you to collaborate with the Program in several ways:

Set Up or Publicize a Carpet Recycling Drop-off Site

Your help is needed to encourage local transfer stations or other facilities to set up and publicize carpet recycling drop-off sites. To see if there is a CARE sponsored drop-off site in your county, visit the drop-off site map at CarpetRecovery.org/CA. If you would like to set up a drop-off site, please contact: CA@CarpetRecovery.org. We encourage jurisdictions to add carpet recycling information to their website, especially under mandatory commercial recycling.

Inform Retailers and the Public

The Program has informed California carpet retailers about the assessment to be charged under AB 2398 (currently \$0.35 per square yard). If you have opportunities to provide information brochures to carpet retailers and the public, please order them here: CarpetRecovery.org/CA-Recycling-Coordiators.

Buy Recycled

Work with procurement staff to include carpet, carpet underlayment, and other products made with post-consumer recycled carpet in your purchase orders and specification sheets. The buying power of state and local government agencies can divert carpet from California landfills, promote markets for recycled-content products, and help your agency fulfill SABRC requirements. Learn more at CarpetRecovery.org/Products.

Consider Grant Opportunities

CARE offers equipment and infrastructure micro grants to increase collection. Information on these and other grants can be found at CarpetRecovery.org/CA-Grants.

Facilitate Outreach & Education

CARE depends on your help to reach stakeholder groups within your agency or community. Program staff members are available to give in-person presentations to:

- Your procurement team, about products made with post consumer recycled carpet.
- Your solid-waste task force, about setting up a carpet recycling drop-off site.

10-19

CarpetRecovery.org/CA

 [@CarpetRecycle](https://twitter.com/CarpetRecycle)

- Local carpet retail associations, about the assessment, use of funds and resources available.
- Local contractor associations, about where and how to recycle used carpet.

Use of Recycled Carpet

In 2018 alone, processors recycled 49 million pounds of carpet collected from California homes and businesses. Post-consumer carpet is recycled into fiber or plastic pellets, which can be used to make a broad range of products including carpet, carpet tiles, carpet underlayment, and products for industries including automotive, transportation, and construction.

To browse currently available products made with post-consumer recycled carpet visit CarpetRecovery.org/Products.

Program Funding and Activities

Under AB 2398, an assessment is charged on every square yard of carpet sold and/or shipped in California (\$0.35 per square yard). All California carpet retailers are responsible for charging and reporting the Carpet Stewardship Assessment on all carpet sold in California.

Assessment funds are invested into efforts to help the California Carpet Stewardship Program influence recyclability of manufactured carpet, increase reuse opportunities, provide collection opportunities, increase recycled output, and support the development and procurement of products made with post-consumer carpet. Key activities include:

- **Subsidies:** CARE allocates subsidies to qualified post-consumer carpet Processors, Collector/Sorter Entrepreneurs (CSEs) and Secondary Product Manufacturers, to support the collection, recycling and processing of post-consumer carpet into new products.
- **Drop-off sites:** CARE establishes and services public drop-off sites, paying for the rental of collection containers and transporting them to participating processors for recycling. For a map of current drop-off sites, visit CarpetRecovery.org/CA.
- **Grants:** CARE manages a grants program that has encouraged investment in carpet recycling facilities and supports the recovery of carpet for recycling. Visit CarpetRecovery.org/CA-Grants.
- **Education and Outreach:** CARE conducts multiple outreach efforts, including a monthly newsletter, annual public workshops, presentations and a wide array of print and digital communications.

Contact Us

To stay informed, sign up for our monthly e-news at CarpetRecovery.org/CA-Recycling-Coordiators.

To connect with the California Carpet Stewardship Program, contact CARE Senior Associates:

Lisa Mekis: lmekis@CarpetRecovery.org, 510-862-6033

Jared Zitron: jzitron@CarpetRecovery.org, 310-699-3717

California Resource Recovery Association (CARRA) Presentation – sample slides



Highlights 2018-19

California Carpet Stewardship Program Update

August 2019



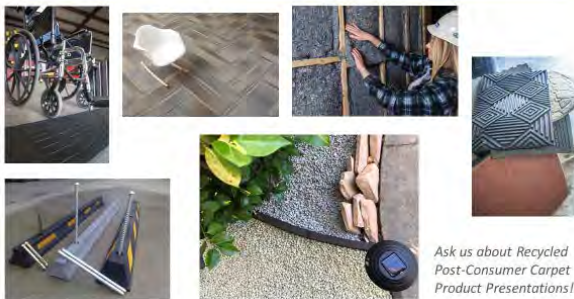
Drop-Off Site/Collections

60 CARE Public Drop-off Sites in 50 Counties



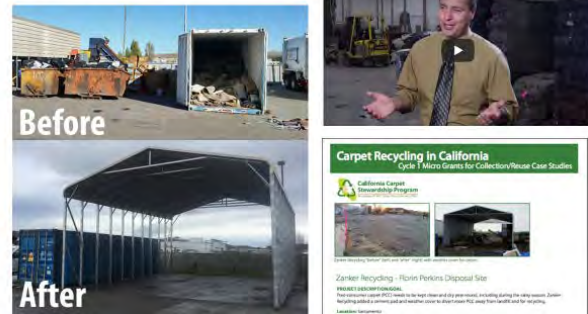
Recycled Carpet Products

Creation & Promotion of Recycled Post-Consumer Carpet Products:



Grant Support

Micro Grant Case Study: Napa Recycling



Local Government Resources

Ask us for more information on how **local government** can support carpet recycling in California!



CARE in Your Community

Promoting Carpet Stewardship in Your Community

- Retailer Outreach
- Installer/Contractor Outreach
- Convenient Recycling Drop-Off Awareness
- Consumer Outreach



Local Government Resources on CARE Website

The screenshot displays the CARE website's navigation and content sections. At the top, there is a search bar labeled "Google Custom Search" and a "Member Login" link. The main header features the CARE logo (CARPET AMERICA RECOVERY EFFORT) and the tagline "Developing Market Based Solutions for the Recycling & Reuse of Post-Consumer Carpet". A navigation menu includes links for "About", "Recovery Effort", "California", "States", "News/Blog", "Conference", "VPS Program", and "Contact Us".

A prominent yellow banner highlights the "California Carpet Stewardship Program/ CA Recycling Coordinators" section. Below this, the page is divided into two columns. The left column lists various resources under the heading "California Carpet Stewardship Program":

- California Drop-off Site Map
- California Retailers
- AB 2398 - California Carpet Stewardship Information for Manufacturers
- CA Installers
- CA Recycling Coordinators
- California Consumers
- Drop-Off Sites Services
- Information for Applicants for AB 2398
- Funds
- Products

The right column is titled "Resources for Local Government Recycling Coordinators" and contains the following text:

Local government agencies are vital partners for disseminating information on carpet recycling to retailers, transfer stations and the general public. The California Carpet Stewardship Program can provide you with information and resources to empower you to communicate with your constituents with a goal of increasing carpet recycling in your area.

Below the text are several resource links:

- [CARE Program Overview for Local Government](#)
- [How to Become a CARE Drop-Off Site](#)
- [Buy Recycled - Recycled Post-Consumer Carpet Product Manufacturers](#)
- [Sample Communication Language - Newsletter/Website/Social Media](#)
- [Social Media Post Examples for Promoting Carpet Recycling](#)

The section concludes with a heading "Drop-Off Site Map" and a paragraph: "CARE's website has an updated, interactive [map of drop-off sites](#) that accept carpet from the public. Opening hours, contact information, and fees charged are included in each listing. Note: It is important to contact the drop-off site before visiting. Some

Market Development

Carpet Recycling in California

Products Made From Recycled Carpet



Post-consumer carpet can be recycled and made into a variety of products, including more carpet. Pictured are products from Interface, Bonded Logic, Reliance Carpet Cushion and SafePath Products.

More than 340 million pounds of carpet is discarded in California landfills every year – that’s the weight of 80,000 SUVs. But that carpet can be recycled into useful new products by U.S. manufacturers. Post-consumer carpet is recycled by processors into fibers or plastic pellets, which can be used to make a broad range of products, including carpet, carpet tiles, carpet underlayment and products for the automotive, transportation and construction industries.

The California Carpet Stewardship Program supports markets for recycled post-consumer carpet via grants, technical assistance and promotion.

See over for a list of manufacturers offering products containing recycled California post-consumer carpet.

Additional products are expected to launch later in 2019; see the CARE website for details and updates: www.CarpetRecovery.org/Products.

How you can help

Buy wisely.

Ask your retailer about eco-friendly carpet and fiber underlayment. Look for products made with recycled carpet content and that can be easily recycled at the end of life.

Make it last.

Taking good care of your carpet will make it last longer and keep your home healthier. See the Carpet and Rug Institute (www.Carpet-Rug.org) for tips on proper cleaning and maintenance.

Recycle right.

























Ask your flooring retailer or contractor to recycle your old carpet during installation. To find a carpet collection site in your area, visit www.CarpetRecovery.org/CA.


07-19

CarpetRecovery.org/CA

 @CarpetRecycle

Recycled Post-Consumer Carpet-Derived Product Manufacturers

<p>American Fiber Cushion <i>AmericanFiberCushion.net</i></p>  <p>Carpet Cushion</p> <ul style="list-style-type: none"> Matrix Cushion Products 	<p>Bonded Logic <i>BondedLogic.com</i></p>  <p>Building Insulation</p> <ul style="list-style-type: none"> UltraTouch™ Denim Insulation Multi-Purpose Roll Denim Insulation  
<p>CarpetCycle <i>Carpetcycle.com</i></p>  <p>Acoustic Insulation</p> <ul style="list-style-type: none"> Quiet-Tech 	<p>GeoHay <i>GeoHay.com</i></p>  <p>Water Management Products</p> <ul style="list-style-type: none"> GeoHay erosion and sediment control wattles, various lengths, also branded as GutterBuddy, SiltSentry, HanesGeo and Ferguson 
<p>Interface <i>Interface.com</i></p>  <p>Modular Carpet Tile Standard product lines when combined with GlasBacRE backing:</p> <ul style="list-style-type: none"> Cartera Human Nature Narratives Net Effect Urban Retreat Equal Measure Lateral Near & Far Pietra Viewpoint II 	<p>MP Global Products <i>MPGlobalProducts.com</i></p>  <p>Flooring Underlayment</p> <ul style="list-style-type: none"> QuietWalk QuietWalk Plus+ Ventilayer 
<p>Reliance Carpet Cushion <i>RelianceCarpetCushion.com</i></p>  <p>Carpet Cushion Padding</p> <ul style="list-style-type: none"> Performance, Performance Plus and Performance Double Stick: 28, 32 and 40 ounce per square yard weights 	<p>SafePath Products <i>SafePathProducts.com</i></p>  <p>ADA Ramps, Walk Repair Systems, Absorbents</p> <ul style="list-style-type: none"> EZ Edge™ Transition EntryLevel™ Landings GreenSidewalk Repair™ CourtEdge™ Reducers AbsorbsWell  
<p>Sierra Mat & Rubber <i>SierraRubberProducts.com</i></p>  <p>Mats, Smart Pavers and Wheel Stops</p> <ul style="list-style-type: none"> Wheel stops Entry mats Landscape pavers Floor mats  	<p>Visions Environmental <i>StoneMiracle.com</i></p>  <p>Landscaping Aggregate</p> <ul style="list-style-type: none"> Stone Miracle™ decorative colored aggregate Wheel Stops  

 Double Green™-labeled products contain recycled California post-consumer carpet material plus at least one other post-consumer recycled material.

Contact:

California Carpet Stewardship Program: CA@CarpetRecovery.org.

CarpetRecovery.org/CA

 [@CarpetRecycle](https://twitter.com/CarpetRecycle)

Recycled Carpet-Derived Products

CONTAINING CALIFORNIA-SOURCED CARPET



CarpetRecovery.org/CA

11-19

Carpet Recycling in California

2019 Grants Program



Capital Improvement Grant recipients SafePath, 3B Protection and Swiss Trax (L to R) create products with post-consumer recycled carpet.

CARE Grants Increase Carpet Recycling in California

Since inception, CARE has awarded over \$7 million in grants to 26 organizations.

Grant amounts range from \$15,000 in micro grants to \$500,000 in capital improvement grants and support improved carpet collection, new product and application testing, and major infrastructure and equipment purchases. These investments are expected to help increase the recycled output rate to meet the goal of 24% by January 1, 2020.

Funding Available in 2019

Capital Improvement Cycle 3A Grants

CARE's Capital Improvement Grants provide funding for capital improvements that will establish, increase, improve and enhance additional California generated post consumer carpet (PCC) reuse, recycling and/or utilization of recycled content product manufacturing.

Individual projects may apply for up to \$150,000 in Cycle 3A funds. CARE is accepting applications for Cycle 3A through 2019, based on available funding and market readiness. Grantees selected during this round must achieve project completion by June 30, 2020.

Micro Grants

Micro Grants for Collection/Reuse: Funding Now Available! See back for details.

CARE will give strong preference to projects that can prove project impact by the end of 2019.

Learn more: CarpetRecovery.org/CA-Grants

08-19

CarpetRecovery.org/CA

[@CarpetRecycle](https://twitter.com/CarpetRecycle)



Micro Grant recipients used funding for the purchase of rain shelters and sorting equipment.

Micro Grants for Collection/Reuse

The rainy season is coming! Are you ready for winter? A CARE grant can help.

CARE's Micro Grants for Collection/Reuse (Cycle 2M funds) support the additional collection and reuse of California post-consumer carpet (PCC). Cycle 2M funds will be awarded for infrastructure projects and/or purchase of equipment that improve the operational logistics of properly collecting and/or reusing California PCC under a new or established carpet collection program.

Applications will be accepted and reviewed on a continuous basis through 2019.

Maximum grant award is \$15,000; California-based projects only.

Grantee projects must be completed by June 30, 2020.

Eligible applicants include:

- Public entities, such as California cities, counties, public school districts, public colleges and universities, special districts, parks and recreation districts, and state agencies (including offices, departments, bureaus and boards);
- Joint Powers Authorities (JPA) if the JPA Agreement includes solid waste responsibilities;
- Public or private businesses, such as transfer stations, recycling centers and disposal sites;
- CARE drop-off sites, Collector Sorter Entrepreneurs and Processors; and
- Non-profit entities such as reuse stores.

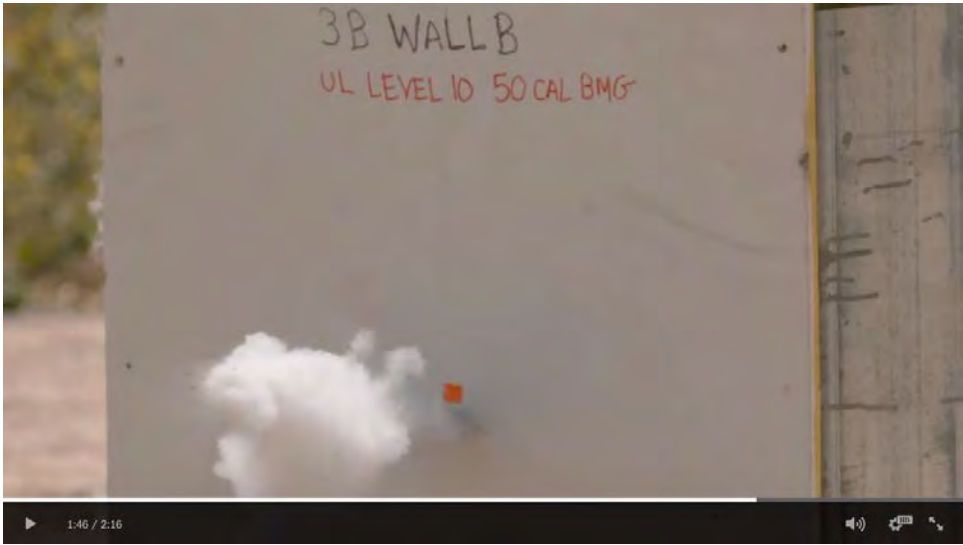
Learn more: CarpetRecovery.org/CA-Grants#2m

Grant Funding: Product Testing Videos for 3B Protection

Door



Wall





E-News

California Carpet Stewardship Program
July 2019 Update



California Carpet Stewardship Program
An initiative of CARE: Carpet America Recovery Effort

New California Carpet Stewardship Law Being Considered

A bill to further regulate carpet recycling in California is making its way through the California legislature. [AB 729](#) was introduced by Assembly Member Kansen Chu in February and has been twice amended in Committees.

As originally proposed, the bill was to require a carpet stewardship organization to include in the Stewardship Plan a description of the process by which the organization will transfer assessment funds to a successor carpet stewardship organization in the event that such an action becomes necessary. It also requires a contingency plan in the absence of an approved plan by CalRecycle. The bill increases existing administrative penalties for a violation of the stewardship program from up to \$1,000 per day to up to \$5,000 per day.

As recently amended, the bill would further require the Carpet Stewardship Plan to include a funding mechanism with differential assessments based on carpet recyclability and recycled content. [The bill](#) will next be heard at the Appropriations Committee meeting at 10:00 a.m. on August 12. CARE's position is that the bill has provisions that are detrimental to well informed legislation, due to imposition of differential assessments. As part of the approved Plan, a study is underway to assess such a provision in an environment of shifting markets.

Over 24 Tons of U.S. Open Carpet Gets Recycled

Last month the 2019 U.S. Open Golf Championship at Pebble Beach welcomed some 250,000 visitors—and a lot of trash. The majority of waste materials were construction and demolition debris generated during teardown of the event. Over 48,000 pounds of polypropylene carpet from the event was recycled.

The carpet was separated by hand from other building materials and sent to the [Monterey Regional Waste Management District](#) located in Marina—a new CARE drop-off site. [Green Waste Recovery](#) in San Jose received and sorted the carpet, which will ultimately be sent for recycling to [Circular Polymers](#) in Lincoln, CA. From that material, Circular Polymers will manufacture feedstocks (pellets, fiber and PC4) for products such as equestrian padding, ADA-compliant ramps and transitions, and materials for the construction industry.



Used event carpet ready to send for recycling.

Grantee Visions Environmental Unveils New Website

CARE Grantee [Visions Environmental](#) has a [new website](#) to promote their Stone Miracle product line. The website will help to promote [Stone Miracle decorative landscaping aggregate](#), partially made with recycled carpet material, to landscaping businesses and garden stores in Northern California.



The Stone Miracle home page

The website was created through CARE's marketing assistance program for California grant recipients, who are working to increase the amount of recycled carpet-derived material kept out of landfill.

Tarkett Recognized for Design Innovation

Flooring manufacturer Tarkett has been recognized with the first Re/focus Sustainability Innovation Award in the Design category for ethos Modular Carpet Tile with Omnicot

Blog Post Examples

News/Blog
 News Media Archive
 Blog
 Reading Room

CARE Grants: Investments in Collection, Recycling and Market Development Show Promising Results

April 6, 2019

Grants are a valuable investment in growing recycled output as well as the market for products made with post-consumer carpet. The growth is what pulls an increasing volume of carpet into the recycling stream and away from landfills each year. CARE's grants have had, and continue to have, tremendous impact on the health of the carpet recycling industry; however, it can take months or even years for the full impact of the grants to be realized among carpet recycling stakeholders.



CARE Grantee Swastax is seeing varying percentages of RCM, PET and PP in their existing flooring sites with success.

In just its first two cycles, the CARE grants program has awarded \$5.9 million to 8 organizations in Cycle 1 and 18 organizations in Cycle 2. Grant amounts ranging from \$15,000 micro grants to \$500,000 capital improvement grants support improved carpet collection, new product and application testing, and major infrastructure and equipment purchases. These investments are expected to help the recycled output rate rise to meet the goal of 24% by January 1, 2020.

The first two CARE grant cycles to date have seen significant results:

Cycle 1 Capital Improvement Grants

- \$2.2 Million awarded
- 8 million pounds in new Recycled Output in 2018
- 13 new California jobs

Cycle 1 Product Testing Grants

Recycled Carpet-Derived Product Presentations Available

February 13, 2019

Carpet America Recycled Effort (CARE) and CalRecycle's recycled content construction products market development group are collaborating to give presentations featuring recycled carpet-derived products. These products provide environmental benefits with no sacrifice in quality.



CalRecycle offers a database of recycled products for construction projects.

The presentations are appropriate for facility managers, public works departments and design professionals involved in project development and product selection.

Find out [how to schedule a presentation](#).

Learn more:

- [CalRecycle's guide to CalGreen Products](#)
- [Carpet America's RFP/Products](#)

Updated February 2022

CARE Releases RFP for Carpet Recycling Cost Study

January 26, 2019

CARE is [seeking proposals](#) for an economic study to determine the U.S. and California statewide average and range of costs associated with collecting and processing post-consumer carpet (PCC), along with costs. The cost survey includes recycling for collection, processing and manufacturing, along with a regional analysis for rural and non-rural recycling center costs.

Stewardship Groups Partner on Media Insert to Inform about Recycling

April 15, 2019

CARE has partnered with product stewardship groups [PaintCare](#), [Mattress Recycling Council](#) and [Call2Recycle](#) to create a four-page insert on how to recycle old batteries, mattresses, paint and carpet. Some 2.1 million copies of the insert will appear in 25 newspapers around California during April as part of Earth Month.

The insert is designed to inform Golden State consumers that carpet, paint, mattresses, and batteries can be recycled (though not just in the blue bin), and to show the products that can be made from the recycled products. It was produced by Sacramento-based SN&R publications.



[View the insert.](#)

« Previous Page 1 2 3 4 5 6 ... 32 Next Page »

Events



2019 Fresno Home & Garden Show



2019 San Jose Home Show

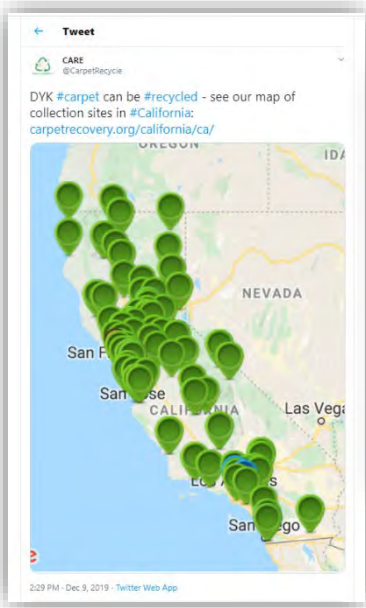


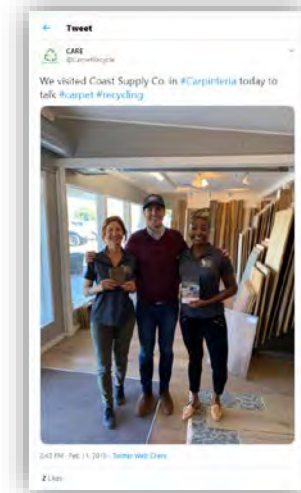
2019 Sacramento Home & Garden Show

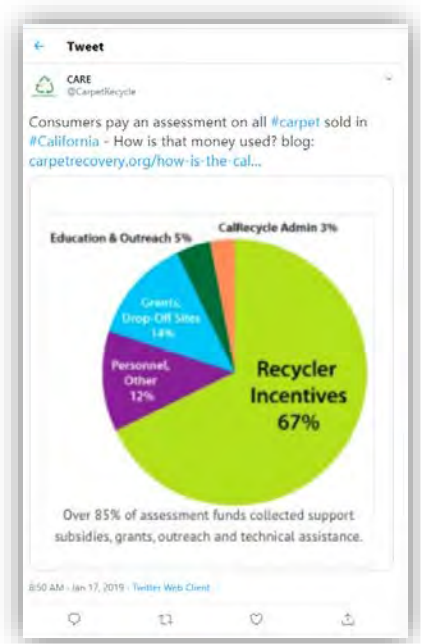


2019 Riverside Home & Garden Show

Twitter

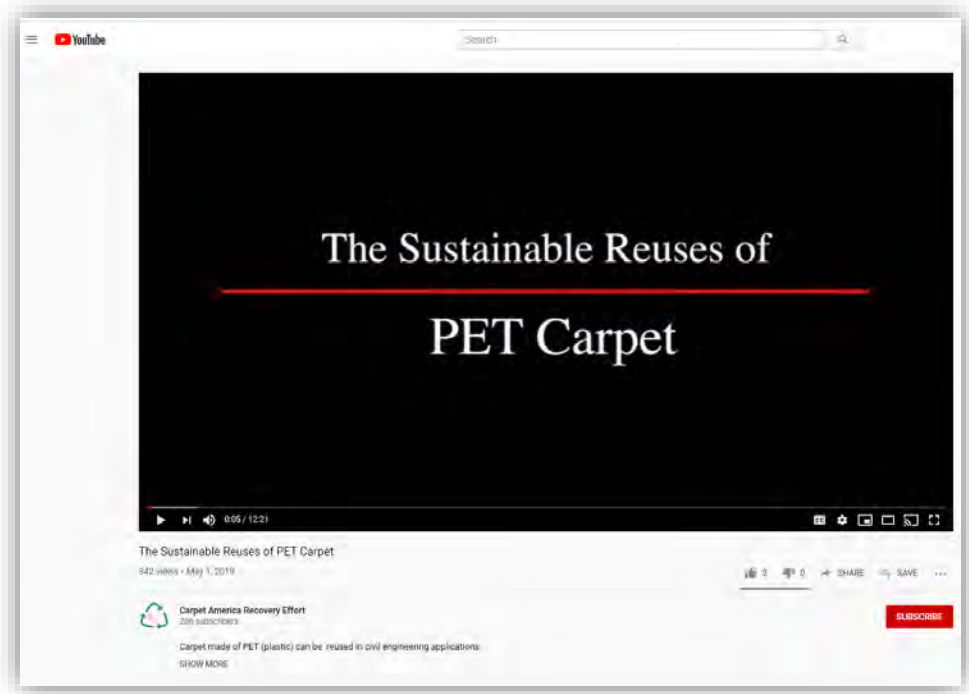




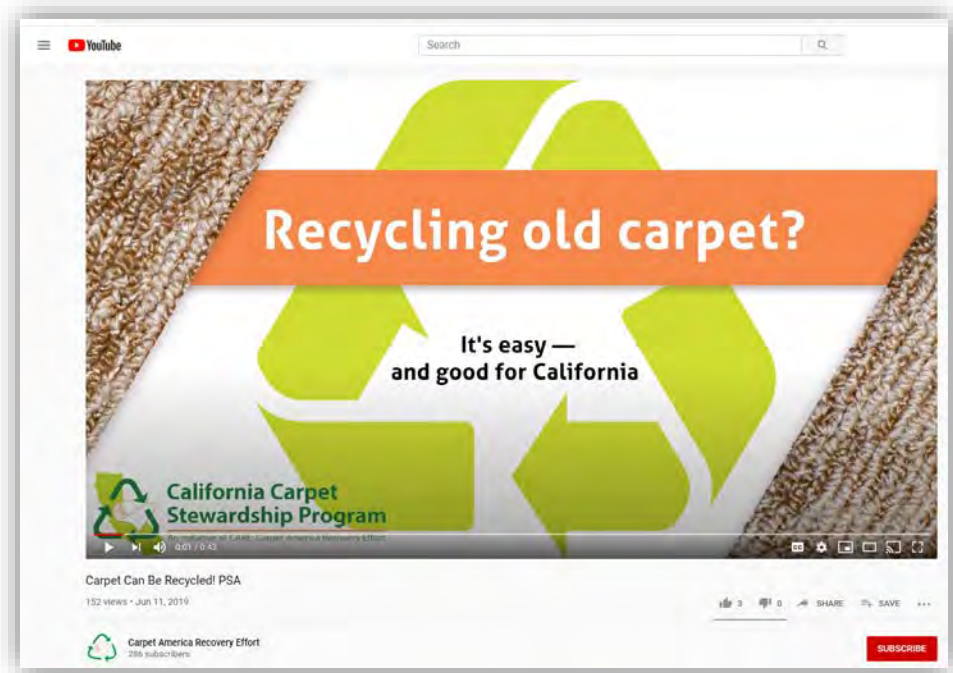


Videos

The Sustainable Reuses of PET Carpet, 5/1/2019



2019 Carpet Recycling PSA, 6/11/2019



10.9 CARE Response to Advisory Committee Overall Recommendations

The only formal recommendations from the Advisory Committee to CARE in 2019 were regarding the 2018 Annual Report, which were included in the 2018 Annual Report. No other Advisory Committee recommendations or CARE responses were provided in 2019.

10.10 Notices to Subsidy Participants

Copies of three example email notices are provided on the following pages:

1. October 2019 Monthly Reporting Forms Now Available (sent November 4, 2019)
2. November 2019 Monthly Reporting Forms Now Available (sent December 3, 2019)
3. REMINDER - NOVEMBER FUND REQUEST DUE DECEMBER 31st (sent December 27, 2019)

Email #1

From: CARE Reporting <CARE.Reporting@aprio.com>
Sent: Monday, November 4, 2019 9:49 AM
To: CARE Reporting <CARE.Reporting@aprio.com>
Cc: Bob Peoples <bpeoples@carpetrecovery.org>
Subject: October 2019 Monthly Reporting Forms Now Available

Dear **CA Recyclers**,

Your October reporting forms are now available in the online reporting tool: <https://epm03.hostanalytics.com/>. **Requests must be received by November 30, 2019 to be eligible for payment.**

REMINDER:

To navigate to the September forms, make sure that “2019-10 – Oct Actual Data” is selected from the dropdown list in the top left corner.

NEW FOR OCTOBER 2019: Under CARE’s approved plan there is a provision for a subsidy to be paid on PET pellets. That subsidy has now been activated and is set at **\$0.11/lb. Sold and Shipped** into an approved application. You will see a new line for reporting in the monthly Manufacturing form.

Line 46 of Form 3.3:

	L	N	AK	AX
19		Description	Sep-19	Oct-19
44	<input type="checkbox"/>	Accounting for Type 1 RO Outputs this month		
45	<input type="checkbox"/>	Tier 2 ALL PET used in manufactured product(s) Sold and Shipped		
46	<input type="checkbox"/>	Tier 2 PET PELLETS ONLY (NEW beg. Q4 2019) used in manufactured product(s) Sold and Shipped		
47	<input type="checkbox"/>	Tier 2 Polypropylene used in manufactured product(s) Sold and Shipped		
48	<input type="checkbox"/>	Tier 2 Nylon 6 used in manufactured products(s) Sold and Shipped		
49	<input type="checkbox"/>	Tier 2 Nylon 6,6 used in manufactured products(s) Sold and Shipped		
50	<input type="checkbox"/>	Total Type 1 RO Sold and Shipped	-	-

Please note that you still have access to your previous forms. You can navigate to previous months through the “Scenario” drop-down list. If you need to make any adjustments to previously reported data or if you have any questions, please email CARE.Reporting@aprio.com.

IMPORTANT NOTICE: The 2018–2022 5-Year Plan has been APPROVED by CalRecycle. We look forward to working with all of you to meet our 24% recycling rate goal by the end of this year.

Regards,
The CARE Team

Visit the CARE website at: www.carpetrecovery.org

Email #2

From: CARE Reporting <CARE.Reporting@aprio.com>
Sent: Tuesday, December 3, 2019 11:32 AM
To: CARE Reporting <CARE.Reporting@aprio.com>
Cc: Bob Peoples <bpeoples@carpetrecovery.org>
Subject: November 2019 Monthly Reporting Forms Now Available

Dear **CA Recyclers**,

Your November reporting forms are now available in the online reporting tool: <https://epm03.hostanalytics.com/>. **Requests must be received by December 31, 2019 to be eligible for payment.**

REMINDER:

To navigate to the November forms, make sure that “2019-10 – Nov Actual Data” is selected from the dropdown list in the top left corner.

Please note that you still have access to your previous forms. You can navigate to previous months through the “Scenario” drop-down list. If you need to make any adjustments to previously reported data or if you have any questions, please email CARE.Reporting@aprio.com.

IMPORTANT NOTICE: The 2018–2022 5-Year Plan has been APPROVED by CalRecycle. We look forward to working with all of you to meet our 24% recycling rate goal by the end of this year.

Regards,
The CARE Team

Visit the CARE website at: www.carpetrecovery.org

Email #3

From: CARE Reporting <CARE.Reporting@aprio.com>
Sent: Friday, December 27, 2019 1:56 PM
To: CARE Reporting <CARE.Reporting@aprio.com>
Cc: Bob Peoples <bpeoples@carpetrecovery.org>
Subject: REMINDER - NOVEMBER FUND REQUEST DUE DECEMBER 31st

Dear **CA Recyclers**,

This is a reminder that your request for AB 2398 funds for NOVEMBER is due on **December 31, 2019**. Your reporting sheets and required attestation forms can be found at <https://epm03.hostanalytics.com>.

Please contact care.reporting@aprio.com with any questions.

Regards,
The CARE Team

Visit the CARE website at: www.carpetrecovery.org

10.11 CARE Response to Advisory Committee Feedback on 2019 Annual Report

The following pages include CARE's response to the Advisory Committee's comments from its review of the draft 2019 Annual Report.



August 20, 2020

CARE Response to Advisory Committee Recommendations related to the 2019 CARE Annual Report to CalRecycle

CARE has carefully reviewed the comments and recommendations of the Advisory Committee. As required by the Product Stewardship for Carpets Law (Public Resources Code Section 42970 42983), CARE is providing a response to the recommendations generated by the Advisory Committee on CARE's 2019 Annual Report resulting from the Committee web meeting of July 21, 2020.

The recommendations section of the Advisory Committee's letter dated April 17, 2020, Attachment 1, is reproduced below. CARE responses immediately follow each recommendation and are in **blue, bold**, 12-Point Arial font. In all cases where recommendations have been adopted, appropriate language has been incorporated into the referenced sections of the 2019 Annual Report to CalRecycle.



July 29, 2020

To: Bob Peoples, Executive Director CARE; Ken DaRosa, Acting Director CalRecycle From: California Carpet Stewardship Advisory Committee (members listed below)

Re: Advisory Committee Recommendations related to the Draft CARE California Carpet Stewardship Program 2019 Annual Report

As required by the Product Stewardship for Carpets Law (Public Resources Code Section 42970 - 42983), the California Carpet Stewardship Advisory Committee (“Advisory Committee”) has received a copy of the “Advisory Committee Review Draft dated July 9, 2020 titled *CARE California Carpet Stewardship Program 2019 Annual Report* (“*Draft CARE California Carpet Stewardship Program 2019 Annual Report*”) required pursuant to Section 42979 from Carpet America Recovery Effort (“CARE”), the carpet stewardship organization. The Advisory Committee received the Draft Annual Report 30 days before submittal to CalRecycle as required in Section 42972.1 (b).

Included in this letter are recommendations to CARE by the Advisory Committee based on the review of the *Draft CARE California Carpet Stewardship Program 2019 Annual Report* during a Zoom Video Conference on July 21, 2020. As required in Section 42971.1 (c), to the extent feasible the Advisory Committee’s recommendations are to be incorporated into the Annual Report by CARE before being submitted to CalRecycle.

If CARE is unable to incorporate these recommendations, a written explanation must be provided to the California Carpet Stewardship Advisory Committee and CalRecycle. The explanation should detail whether CARE plans to incorporate recommendations into a subsequent Annual Report.

California Carpet Stewardship Advisory Committee Members

The Product Stewardship for Carpets Law (Public Resources Code Section 42970 - 42983), requires CalRecycle to appoint an Advisory Committee to provide recommendations to a carpet manufacturer or stewardship organization and to the department on carpet stewardship plans, plan amendments, and annual reports. An additional appointee to the Advisory Committee is also made by both the Senate Committee on Rules and the Speaker of the Assembly.

The Director of CalRecycle appointed the members to the California Carpet Stewardship Advisory Committee according to the general stakeholder categories recommended in the statute. The committee member from the Senate Committee on Rules and the Speaker of the Assembly have also been appointed.

California Carpet Stewardship Advisory Committee Members

Committee Member	Organization	Representing
DOUGLAS WILLIAMS	Los Angeles Fiber Co./ Reliance Carpet Cushion	Collection and sorting, processing and manufacturing
ERIC NELSON	Circonomey Innovations	Independent Industry Expert
FRANCO ROSSI	Aquafil USA	Processing & recycling of carpet, Manufacturing
GAIL BRICE	XT Green, Inc.	Processing & recycling of carpet
HOWARD SAPPER	Carpet Manufacturers Warehouse	Carpet Retailers
JOANNE BRASCH, Ph.D	CA Product Stewardship Council	Environmental Community
JOE YARBROUGH	The Carpet & Rug Institute	Carpet Mills
JORGE OROZCO	SCOR Industries	Speaker of Assembly
NAT ISAAC	City of Los Angeles Environment and Sanitation	Local Government
RACHEL PALOPOLI	Planet Recycling	Carpet Collections/Sorting
STEVE BELONG	Carpet, Linoleum, & Soft Tile Workers Local Union No. 12, District Council 16	Northern CA Floor Covering Finishing Trades Institute Joint Apprenticeship Training Committee
STEVE LANDRETH	ProSpectra Flooring	Senate Committee on Rules
WES NELSON	GreenWaste Carpet Recycling	Carpet Collections/Sorting
Vacant		Local Government
Vacant		Environmental Community

Advisory Committee Plan Review Meeting and Recommendations

The California Carpet Stewardship Advisory Committee met through a Zoom Video Conference on July 21, 2020 to discuss the *Draft CARE California Carpet Stewardship 2019 Annual Report*. All the current members of the committee attended. A quorum was met. Members of the public also attended the meeting through the Zoom Video Conference. The meeting was conducted in compliance with the Bagley-Keene Open Meeting Act with COVID-19 modifications per Executive Orders N-25-20 and N-29-20 signed by Governor Newsom on March 12, 2020 and

March 17, 2020, respectively.

The Committee recommendations from the July 21, 2020 meeting regarding the *Draft California Carpet Stewardship 2019 Annual Report* are provided as Attachment 1.

The committee looks forward to continuing to work with CARE and CalRecycle regarding the California Carpet Stewardship Program.

Respectfully,

July 27, 2020

Rachel Palopoli, Advisory Committee Chair Date

Attachment 1

**California Carpet Stewardship Advisory Committee
Recommendations for the Draft CARE 2019 Annual Report**

CARE responses to all motions are shown in bold, blue, 12-point Arial font.

Motion 1.0

The Advisory Committee recommends that CARE makes the following changes to the Draft CARE 2019 Annual Report:

- a) Include all Advisory Committee Members and Officers in Acknowledgements.
(Page 3)
CARE Response: CARE agrees and has modified the document accordingly.
- b) Use definitions from the statute and include language to cover all stakeholders.
(Page 7)
CARE Response: CARE appreciates this concern and has reviewed the report for appropriate language. However, it should be noted that while CARE works diligently to report as required via the annual report requirements of statute; CARE also endeavors to align the Annual Report in a format that enables CalRecycle staff to review progress in relation to the 8 Performance Goals outlined in CARE's 2018-2022 Plan approved by CalRecycle. Thus, the 8 Performance Goals now shown in the Executive Summary on page 8 (formerly page 7 of the Advisory Committee version of the Draft Annual Report) will stay as reflected.
- c) Check consistency in terminology and company names (throughout document).
CARE Response: CARE agrees and has reviewed the report and worked to provide consistency.
- d) Provide the total number of recycled output (RO) pounds that would have been needed to reach 24% requirement. (Page 11, other places where appropriate).
CARE Response: CARE has added language to the report that addresses this recommendation.
- e) Add an annual recycling rate graph below the quarterly recycling graph in the executive summary (Page 13).
CARE Response: CARE will take this suggestion into consideration and make a determination as to value in the Executive Summary section of the report. There is an opinion that the quarterly graph demonstrates the successive progress over time despite the seasonal fluctuations. The annualized recycling rate is reflected in Figure N.
- f) Add Tier 2 nylon-66 pounds to Table ES-1 (page 15).

CARE appreciates this suggestion and has examined the ramification of publishing such detail volume in the context of confidential business information. A final decision was made to exclude this information.

- g) Work with CalRecycle to ensure Diversion calculation presented on Table ES-1 meets the legal definition of Diversion (Page 15).
CARE Response: CARE has spoken with CalRecycle on this issue. The definition reflected has been and continues to be acceptable and is not a major factor in judging performance.
- h) Remove bullet point that claims CARE solicited input from the Advisory Committee on grant and incentive guidelines as this did not occur (Page 31).
CARE Response: DONE
- i) Complete the 4.9 Capacity Section. Include an estimation whether there was adequate processing capacity to reach the 24% recycling rate (Pages 62-65).
CARE Response: CARE agrees and has completed the section.
- j) Add more hyperlinks where appropriate to link to work products and other important documents referenced in the Annual Report (throughout document).
CARE Response: While not a statutory requirement, CARE understands this recommendation and will look at possibilities. Please note, CARE has inserted more hyperlinks than in previous years. In addition, we have added references to sections and pages in the Plan to aid navigation.
- k) Explain decision not to collect assessments on reused carpet and carpet tiles.
CARE Response: According the definitions outlined in the Carpet Stewardship Law, Section 42971(n) “Retailer” means a person who offers new carpet in a retail sale,...” and Section 42971(0) “Wholesaler” means a person who offers new carpet for sale...” – each of which references “new”. Heretofore CARE was not aware that used carpet sales were required to have the recycling assessment added on reuse sales which would have to be remitted directly to CARE by nonprofit organizations such Habitat for Humanity or other Used Building Materials sellers/retailers. CARE agrees with this recommendation and narrative has been included.
- l) Discuss implementation of new 3X grant cycle and increased maximum award (Pages 149-150, 194).
CARE Response: CARE agrees with this recommendation and such narrative has been added to the report.
- m) Consider making the following changes to Pages 8 & 23: Item #4 - Add percentage to weight data. Item #5- Reduce disposal by landfill, WTE, and Kiln.
CARE Response: CARE has examined this recommendation and reflects that the items listed on Page 8 are taken directly from Public Resources Code 42972. Due to the complexity of these charts, CARE respectfully has decided not to further modify the charts.
- n) Capitalize “Convenience Study” (Page 9, Item II. a.) **DONE**

- o) Explain the reason for double asterisks on Table 8 in Total Diversion (Page 68).
CARE Response: The double asterisks were legacy “notes” items which will be removed in final table formatting version to meet ADA requirements:
- p) Include missing information in referenced studies funded and conducted during 2019, including appendices from the linked study reports, e.g. the Microfiber and PFAS information from the linked GHD Engineering report (Page 100).

CARE Response: DONE missing appendices were immediately added to the website. Note: CARE endeavors to provide annual reporting on program activities that encompass all activities/studies carried out, and especially those which are intended explore safe, broad-based use outlets for recycled PCC materials and products, as well as those for which concern have been raised. To that end, CARE appreciates the thorough review and professionally appropriate and respectful inquiry by Advisory Committee members to help make the report more accurate and beneficial. However, CARE resents the implication raised by the Committee Vice-Chair that this was a deliberate action on the part of CARE to hide information. It was a simple and honest posting mistake as the report was in two parts (body and appendices of 490 pages), similar to how the Advisory Committee received the Draft Annual Report. The appendices were accidentally missed as it was assumed, they were included in the posted report as a whole. It should be further noted that the aforementioned report in its entirety was sent out to CARE stakeholders closely monitoring CARE in the [February e-news](#), a [CARE blog post on February 25, 2020](#) and is posted [here](#) in the Reading Room on CARE’s website.

CARE would like to also note for the record that during the meeting the Vice-Chair implied that since the legal and accounting costs were combined CARE might be hiding the use of program funds to pay for litigation against the state. CARE resents such a veiled allegation. Dr. Peoples pointed out that CARE has passed both independent and CalRecycle audits multiple times where such statutory prohibitions would be examined. CARE has completed the last several years of audits with no findings and in the last two years, no recommendations. These audits are public information as published, unedited, in our annual reports. To imply otherwise in an attempt to impugn CARE’s integrity and is unacceptable, continues to hurt the atmosphere of cooperation between CARE and the Advisory Committee, and is a disservice to the people of California.

Motion to Approve: Eric Nelson Second: Joanne Brasch
 Ayes (12): Doug Williams, Eric Nelson, Franco Rossi, Gail Brice,
 Howard Sapper, Joanne Brasch, Joe Yarbrough, Jorge Orozco, Nat Isaac, Rachel

Palopoli, Steve Belong, Steve Landreth

Nays (0):

Abstain (1):

Wes Nelson attended meeting but due to technical problems he abstained from this vote

Absent (0):

The motion passes

Motion 2.0

The Advisory Committee acknowledges that CARE did a good job increasing the recycling rate during 2019, and recommends CARE expand on the reasons for the quarterly recycling rate increases compared to the quarters the previous year.

CARE Response: CARE genuinely appreciates the acknowledgement and will make an effort to add narrative to compare the 2018 vs 2019 quarterly results.

Motion to Approve: Gail Brice Second: Nat Isaac

Ayes (13): Doug Williams, Eric Nelson, Franco Rossi, Gail Brice, Howard Sapper, Joanne Brasch, Joe Yarbrough, Jorge Orozco, Nat Isaac, Rachel Palopoli, Steve Belong, Steve Landreth, Wes Nelson

Nays (0):

Abstain (0):

The motion passes

- End response -

10.12 Definitions

*Definitions presented below are included within the AB 2398 statute, and/or in the Product Stewardship for Carpet Regulations (November 2011). Revisions presented in this report are underlined. New definitions, as a result of AB 1158, program changes or CalRecycle's approval of CARE's 2018–2022 Plan, are noted with an asterisk.**

Advisory Committee*: a mandated committee under AB 1158 to provide comments and recommendations on carpet stewardship plans, amendments to plans, and annual reports.

AUP: (Agreed Upon Procedures): A prescribed procedure executed by an external accounting firm or contractor to examine the records of Program participants to verify compliance and prevent fraud.

Calcium Carbonate: See *Post-Consumer Carpet Calcium Carbonate (PC4)* below.

Capacity: Theoretical maximum volume of carpet discards able to be processed by participating processors in a given year, based on self-reported estimates and/or permitted capacity figures. In line with CalRecycle **FacIT** definitions, Capacity is generally presented in tons per year (TPY). Both pounds per year and TPY are presented in this 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 America Recovery Effort (CARE): A nationwide, 501(c)(3) non-profit organization whose focus is on post-consumer carpet stewardship.

Carpet As Alternative Fuel (CAAF): Fuel that has been produced from source-separated and sorted post-consumer carpet and processed, including (1) extraction of components for recycling if at all possible and (2) size reduction, shredding, and/or blending with coal fines, etc. CAAF is not a type of recycling, but it is a type of diversion for purposes of this Program. CAAF is an alternative fuel source to other fuel sources such as coal, natural gas, and fuel oil.

Carpet-Derived Aggregate (CDA): A potential utilization of recycled output as an alternative to heavy rock and soil for use in geotextiles, road construction or similar civil engineering application; similar to Tire Derived Aggregate (TDA). Examples might include lightweight wall back fill, vibration attenuation, embankment repair, etc.

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

Carpet Mill: A primary producer of carpet, carpet tiles, or related products covered under the Plan. Also referred to as a *carpet manufacturer*.

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

Collected: Gross collected pounds of California PCC (total includes material that may eventually be sent to landfill). Also referred to as *Gross Collected* and *Gross Collection*.

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

Collector/Sorters: See *Collector/Sorter Entrepreneur (CSE)* below.

Collector/Sorter Entrepreneur (CSE): A business that provides carpet recycling collection services for retailers, disposal sites or other sites. CSEs sort received PCC by material type for third-party reuse, or wholesale to Tier 1 processors for recycling. CSEs do not convert material into recycled output. Also referred to as *Collector/Sorters*.

Demolition: Represents the teardown of a building (one-time carpet removal). There is no estimate of percentage of flooring covered by carpet.

Discards: Carpet that has completed its lifecycle as a consumer item or is no longer used for its manufactured purpose. Also referred to as *post-consumer carpet materials*.

Disposal*: The management of solid waste through landfill disposal, transformation, or engineered municipal solid waste (EMSW) conversion, at a permitted solid waste facility (per PRC 40192). Under this Plan total pounds of post-consumer carpet sent to landfill, CAAF, kiln, WTE, and incineration are counted as disposal.

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

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

Diversion: “Diversion” or “divert” means activities which reduce or eliminate the amount of solid waste disposed at landfills in a manner consistent with the state's hierarchy for waste management pursuant to Section 40051. (Ref: 14 CCR §18941)

Diversion (Net): See *Net Diversion*.

Diversion (Reported): See *Reported Diversion*.

DSC: Differential Scanning Calorimeter. Analytical testing device for identification of polymer/fiber type based on differential melting points.

Education/Communication Costs: Refers to expenses incurred in support of Marketing, Education and Outreach (ME&O) efforts conducted under the existing and extended Plan. Includes the cost of market development promotion, on-the-ground education and outreach support, communications, collateral and materials development, and related expenses, as well as costs related to the California Council on Carpet Recycling.

End-of-life (EOL) Costs: Program cost associated with the management of carpet discards from the point when a product is discarded by the consumer or the end of the useful life of the product, whichever occurs first. Costs may include subsidies, incentives or other expenditures related to reuse, recycling, incineration for energy recovery, landfilling and other forms of carpet disposition in line with Program goals. It also includes storage and transportation for the collection drop-off site program.

Energy Recovery: Burning carpet in a kiln or waste-to-energy facility or as carpet as alternative fuel (CAAF) to replace other fuels such as coal, natural gas, or fuel oil.

Entrepreneur: For the purposes of this report, it is defined as an individual or privately held company that actively, collects, sorts, processes, or manufactures products made from post-consumer carpet. It does not refer to a carpet manufacturer.

ESJPA: Environmental Services Joint Power Authority.

FacIT: [Facility Information Toolbox](#); a tool developed by CalRecycle to track statewide activities and total capacity, current throughout, and available capacity for each activity on an annual basis.

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

Governance Costs: Includes costs charged by CalRecycle for regulatory oversight of the Program; it is limited to 5% of the aggregate assessments collected for the preceding calendar year.

Gross Collection (GC): Estimated pounds of PCC removed from waste stream for reuse, recycle, CAAF, kiln, or WTE, as reported to CARE by Collector/Sorters, prior to processing. This also includes unrecyclable PCC or carpet processing waste that may eventually be sent to landfill. The terms *Recovered* and *Collected* were previously used to describe *Gross Collected*.

Gross Collection Conversion Rate: The ratio of gross collections converted into recycled output (RO), expressed as a percentage of gross collections; also referred to as *yield*.

Implementation Costs: Includes total expenses associated with Program implementation, as the sum of EOL subsidies, incentives, grants, technical assistance, education/communication costs and program administration costs.

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

In-ground Applications: (subject to testing protocols): Placing PCC and/or byproducts of carpet at or below the surface of the earth. This application of using PCC must consist of transforming PCC into a useful product, must meet all local government laws and codes, and must be approved by the CARE SPC Definitions Sub Committee.

Examples include:

- PC4 when spread or mixed into ground as a soil amendment.
- PC4 in roadbed stabilization.
- Fiber in equestrian arenas, farms, race tracks, etc.
- Fiber from processed PCC used for sediment filtration, water filtration, roadbeds, etc.
- 100% wool carpet or wool fiber (no blends) as soil nutrient or weed control.

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.

Manufacturer: A manufacturer of secondary products made with post-consumer carpet content. Manufacturers receive finished (Type 1) recycled output from Tier 1 processors and utilize this material in the production of finished secondary products. At this time, manufacturers are only eligible for subsidy payments if they use non-nylon or nylon 6 Type 1 output. CARE reserves the option to extend the manufacturer subsidy system to nylon-based Type 1 output if market dynamics justify. In this report, secondary manufacturers are referred to as Tier 2 manufacturers.

Marketing, Education & Outreach (ME&O): Communications, education, and/or outreach activities related to Program promotion, technical assistance or stakeholder support for the purpose of increasing Program adoption, impact and/or effectiveness.

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

Net Diversion*: Estimated total PCC removed from California landfills for reuse, recycle, CAAF, kiln, WTE, or export. It is calculated as the difference of gross collected pounds minus PCC and process waste pounds that ultimately goes to landfill from Tier 1 processors or CSEs. Based on gross collection being an estimate by the CSEs, Net Diversion is also an estimate.

Nongovernmental Entities (NGOs): Nongovernmental entities or organizations (NGOs).

PC4: See Post-Consumer Carpet Calcium Carbonate (PC4) below.

Plasma: An extreme thermal process using plasma which converts organic matter into a syngas (synthesis gas), which is primarily made up of hydrogen and carbon monoxide. A plasma torch powered by an electric arc is used to ionize gas and catalyze organic matter into syngas, with slag remaining as a byproduct. It is used commercially as a form of waste treatment and has been tested for the gasification of municipal solid waste, biomass, industrial waste, hazardous waste, and solid hydrocarbons, such as coal, oil sands, petcoke, and oil shale.

Post-Consumer Carpet Calcium Carbonate (PC4): (subject to testing protocols): The residual, non-fiber content that is collected by a *Type 1 processor* when a carpet is separated. This is typically in the form of a powder, which is associated with the “ash content” when an ash test is performed. The substance can be a high PC4 product or a mix that could include coal fly ash, cured adhesives, and some residual fibers. Because of the carpet manufacturing processes, PC4 in PCC processing will always have residual latex or other backing binder.

Post-Consumer Carpet (PCC) Materials: Carpet that has completed its lifecycle as a consumer item or is no longer used for its manufactured purpose. Also referred to as *discards*.

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. Is meant to refer to some form of mechanical or chemical processing beyond cutting flats, sorting or baling whole carpet.

Processor: Qualified recipient participating under the Plan, that use industry-recognized processes such as shredding, grinding, sheering, depolymerization, etc., to convert discarded whole carpet into finished (Type 1 or Type 2) recycled output, ready

to be utilized as an input material for secondary products. In this report, processors are referred to as Tier 1 processors. Some processors may also function as collector/sorter entrepreneurs or Tier 2 manufacturers.

Program Administrative Costs: All non-subsidy Program expenses, including accounting, legal services, CARE facilities and operational expenses, staffing/contractor expenses, professional services, and marketing, education, and outreach activities. Program administration also includes service payments (governance costs) to CalRecycle for Program oversight.

Pyrolysis: A thermochemical decomposition of organic material in the absence of oxygen (or any halogen). It involves the simultaneous change of chemical composition and physical phase and is irreversible. Pyrolysis is a type of thermolysis and is most commonly observed in organic materials.

RCRC: Rural County Representatives of California, a 35-member county service organization that champions policies on behalf of California's rural counties.

Recovered: Gross collected pounds of California PCC (this includes unrecyclable PCC carpet or carpet processing waste that may eventually be sent to landfill). Also referred to as *Gross Collection*.

Recyclability: Refers to how easily carpets can be separated into their component parts and ultimately recycled. Yield is used as the primary metric to measure changes in recyclability. See also *Yield*.

Recycled Content: Also known as recovered material content, it is 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 recycled content) plus any industrial materials salvaged for reuse (pre-consumer/post-industrial content).

- **Post-Consumer Recycled Carpet Content (PCRCC):** 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 Carpet Mills that are incorporated back into the manufacturing process of the same or a different product.

Recycled Output (RO): The sum of reuse or the material that results from the industry-recognized processing (shredding, shearing, hammer-milling, depolymerization, etc.) of PCC from a processor. Examples of recycled output include fiber, shredded carpet tile,

depolymerized chemical components, carpet filler, PC4, etc. The Program currently distinguishes between two types of material:

- **Type 1 Recycled Output Material:** Higher value recycled output with the most benefits to manufacturers of finished products and which generally takes more processing to achieve. Type 1 recycling materials must meet requirements set by the CARE SFOC. This includes maximum allowable ash content requirements, which are presently set at 25% or less and verified with quarterly ash testing in line with CARE-approved testing protocols. Examples of Type 1 recycling materials include PCC fiber, PCC backing, engineered resins, and material for carpet cushion.
- **Type 2 Recycled Output Material:** Lower-valued recycled output with generally lower benefit to manufacturers of finished products and a lower value than Type 1 recycling materials. Type 2 recycling materials exceed 25% ash content in line with CARE-approved testing protocols. Examples of Type 2 recycling materials include carpet filler and non-functional filler.

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

Recycling Rate: The proportion of carpet discards converted into recycled output, expressed as a percentage of carpet discards. The Program's recycling rate goal is 16% by 2016 and 24% by 2020.

Reported Diversion: The sum of reported PCC removed from California landfills. It is calculated as the sum of reported pounds of reuse + recycled output (Type 1 + Type 2) + CAAF + Kiln + Carcass + Cushion + Export + WTE.

Reuse: The donation or sale of 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.

Rural County: California counties that meet the CalRecycle definition of rural: "A rural county is defined as a county which disposes of less than 200,000 tons of waste annually." (PRC Section 40183-4)

SFOC: Sustainable Fund Oversight Committee of CARE.

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).

SPC: Stewardship Planning Committee of CARE.

Throughput: Consistent with the **FacIT** system definition, *throughput* means the total amount of material actually received at a facility, in tons per year for a specific activity in a given year, equal to gross collections. Throughput is presented in combination with a summary of final disposition data for gross collected discards managed by participating processors and collector/sorter entrepreneurs.

Tier: Distinguishes end market uses of PCC Recycled goods. Where the term *Type* distinguishes between the level of processing of PCC, *Tier* is used to differentiate the end product applications that may or may not need incentives to facilitate their adoptions. Examples of Tier 2 finished products from Type 1 PCC fibers: depoly, fiber pad, home insulation batting, plastic lumber, engineered pellet, and non-woven filtration waddles.

Type: See *Recycled Output (RO)* above.

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

Yield: The ratio of gross collections converted into recycled output, expressed as a percentage of gross collections; also referred to as *gross collection conversion rate*.

###

10.13 Audited Financial Statements

This appendix includes the following financial statements of the California Carpet Stewardship Program for the year ending December 31, 2019. CARE National Audits, which are not paid for with California Recycling Assessment monies, are available to CalRecycle Staff upon request.

The statements were audited by independent Certified Public Accounting firm Brooks, McGinnis & Company, LLC, based in Atlanta, Georgia, and are presented without modification, except to include the Annual Report header, footer, and page numbers.

1. California Carpet Stewardship Program: Financial Statements with Independent Auditor's Report, December 31, 2019 and 2018
2. Independent Auditor's Report on State Compliance Requirements, 2019
3. SAS 114 Letter 2019 for California Carpet Stewardship Program

**10.13.1 California Carpet Stewardship Program:
Financial Statements with Independent Auditor's Report,
December 31, 2019 and 2018**

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM

FINANCIAL STATEMENTS
WITH
INDEPENDENT AUDITOR'S REPORT
DECEMBER 31, 2019 AND 2018

Note: This document has been reformatted to make it complaint with CalRecycle requirements for accessibility. Pagination and formatting in this ADA complaint version of the audit report may differ from the original non-compliant version of the audit report. Page numbers have been removed to avoid confusion with the compiles annual report and appendix, which has one continuous set of page numbers.

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Statement of Functional Expenses
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Schedule of Findings and Responses

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of
The California Carpet Stewardship Program, Inc.

Report on the Financial Statements

We have audited the accompanying financial statements of The California Carpet Stewardship Program, which comprise the statements of financial position as of December 31, 2019 and 2018 and the related statements of activities, functional expenses, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation

and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of The California Carpet Stewardship Program as of December 31, 2019 and 2018, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated August 26, 2020, on our consideration of the Carpet America Recovery Effort, Inc.'s internal control over The California Carpet Stewardship Program's financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Carpet America Recovery Effort, Inc.'s internal control over The California Carpet Stewardship Program's financial reporting and compliance.

Brooks, McAnnis & Company, LLC

Atlanta, Georgia
August 26, 2020

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
STATEMENTS OF FINANCIAL POSITION
DECEMBER 31, 2019 AND 2018

Table 10-5. Assets, Liabilities, and Net Assets

Assets

Description	2019 (\$)	2018 (\$)
Current assets:	<i>see below</i>	<i>see below</i>
Cash and cash equivalents	17,182,039	13,461,519
Assessments receivable, net	6,417,019	4,959,485
Prepaid expenses	1,400	0
Total current assets	23,600,458	18,421,004
Computer equipment	3,694	3,694
Less accumulated depreciation	-2,565	-1,334
Computer equipment, net	1,129	2,360
Total assets	23,601,587	18,423,364

Liabilities and Net Assets

Liabilities

Description	2019 (\$)	2018 (\$)
Due to recyclers	2,501,848	1,902,539
Due to CalRcycle	153,449	125,455
Due to CARE	128,460	72,911
Grants payable	796,018	325,130
Accounts payable and accrued expenses	384,150	659,268
Total liabilities	3,963,925	3,085,303

Net Assets

Description	2019 (\$)	2018 (\$)
Net assets without donor restrictions	19,637,662	15,338,061

Total Liabilities and Net Assets

Description	2019 (\$)	2018 (\$)
Total liabilities and net assets	23,601,587	18,423,364

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
STATEMENTS OF ACTIVITIES
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

Revenues Without Donor Restrictions

Description	2019 (\$)	2018 (\$)
Carpet recovery assessments	28,154,872	21,603,984
Interest income	104,861	64,076
Total revenue without donor restrictions	28,259,733	21,668,060

Expenses

Description	2019 (\$)	2018 (\$)
Program expenses	22,229,598	16,969,431
Administrative expenses	1,730,534	1,581,629
Total expenses	23,960,132	18,551,060

Change in Net Assets

Description	2019 (\$)	2018 (\$)
Increase in net assets without donor restrictions	4,299,601	3,117,000
Net assets at beginning of year	15,338,061	12,221,061
Net assets at end of year	19,637,662	15,338,061

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
STATEMENT OF FUNCTIONAL EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2019

Description	Program Services (\$)	General & Administrative (\$)	Total Expenses (\$)
Salaries and benefits	531,200	251,338	782,538
Benefits and payroll taxes	35,886	7,877	43,763
Subsidies	14,557,201	0	14,557,201
Collection program	563,450	563,450	1,126,900
Communications (E&O)	564,209	564,209	1,128,418
Grants for capacity expansion	3,866,319	0	3,866,319
Professional services	153,882	0	153,882
Legal expenses	206,430	22,901	229,241
Technical assistance	624,042	0	624,042
Program studies	352,622	0	352,622
Reporting database	57,317	0	57,317
Product testing	640	0	640
Accounting	0	299,940	299,940
CalRecycle expenses	493,965	0	493,965
Facilities	6,359	6,359	12,718
Leases	2,100	0	2,100
Program travel expenses	94,532	10,504	105,036
Annual report	29,073	0	29,073
Modeling consultant	60,491	0	60,491
PET project allocation	9,600	0	9,600
Advisory committee	12,820	0	12,820
Dues and subscriptions	1,679	560	2,239
Shipping and mailing	295	0	295
Office expenses	1,422	473	1,895
Telephone	1,1911	1,911	3,822
Insurance	1,012	1,012	3,024

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
STATEMENT OF FUNCTIONAL EXPENSES – CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

Description	Program Services (\$)	General & Administrative (\$)	Total Expenses (\$)
Total expenses before depreciation	22,228,367	1,730,534	23,958,901

Depreciation

Description	Program Services (\$)	General & Administrative (\$)	Total Expenses (\$)
Depreciation	1,231	0	1,231

Total Expenses

Description	Program Services (\$)	General & Administrative (\$)	Total Expenses (\$)
Total expenses	22,229,598	1,730,534	23,958,901
Percentage of expenses	93%	7%	100%

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
STATEMENT OF FUNCTIONAL EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018

Description	Program Services (\$)	General & Administrative (\$)	Total Expenses (\$)
Salaries and benefits	462,660	212,230	674,890
Benefits and payroll taxes	29,217	6,327	35,544
Subsidies	12,933,097	0	12,933,097
Collection program	471,140	471,895	943,035
Communications (E&O)	501,749	502,553	1,004,302
Grants for capacity expansion	779,805	0	779,805
Professional services	399,756	1,002	400,758
Legal expenses	121,161	13,447	134,608
Technical assistance	180,000	0	180,000
Program studies	288,855	0	288,855
Reporting database	190,716	0	190,716
Accounting	0	351,106	351,106
CalRecycle expenses	386,320	0	386,320
Facilities	8,611	8,611	17,222
Leases	2,294	6	2,300
Program travel expenses	98,423	10,936	109,359
Annual report	43,637	0	43,637
Modeling consultant	25,926	0	25,926
PET project allocation	9,600	0	9,600
Advisory committee	28,356	0	28,356
Bank service charge	140	46	186
Dues and subscriptions	931	310	1,241
Shipping and mailing	644	0	644
Office expenses	2,930	977	3,907
Telephone	1,150	1,150	2,300
Insurance	1,007	1,008	2,015

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
STATEMENT OF FUNCTIONAL EXPENSES – CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2018

Description	Program Services (\$)	General & Administrative (\$)	Total Expenses (\$)
Miscellaneous	75	25	100
Total expenses before depreciation	16,968,200	1,581,629	18,549,829

Depreciation

Description	Program Services (\$)	General & Administrative (\$)	Total Expenses (\$)
Depreciation	1,231	0	1,231

Total Expenses

Description	Program Services (\$)	General & Administrative (\$)	Total Expenses (\$)
Total expenses	16,969,431	1,581,629	18,551,060
Percentage of expenses	91%	9%	100%

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

Cash Flows from Operating Activities

Description	2019 (\$)	2018 (\$)
Changes in net assets	4,299,601	3,117,000

Adjustment to Reconcile Change in Net Assets to Net Cash Used in Operating Activities

Description	2019 (\$)	2018 (\$)
Depreciation	1,231	1,231

Changes in Assets and Liabilities

Description	2019 (\$)	2018 (\$)
(Increase) decrease in assessments receivable, net	-1,457,534	528,681
(Increase) decrease in prepaid expenses	-1,400	0
Increase (decrease) in due to recyclers	599,309	85,806
Increase (decrease) in due to CalRecycle	27,994	29,262
Increase (decrease) in due to CARE	55,549	8,486
Increase (decrease) in grants payable	470,888	204,604
Accounts payable and accrued expenses	-275,118	340,522
Total adjustments	-579,081	1,198,592
Net cash provided by operating activities	3,720,520	4,315,592

Cash and Cash Equivalents

Description	2019 (\$)	2018 (\$)
Net decrease in cash and cash equivalents	3,720,520	4,315,592
Cash and cash equivalents at beginning on year	13,461,519	9,145,927
Cash and cash equivalents at end of year	17,182,039	13,461,519

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018

1. Nature of Organization and Significant Accounting Policies

Organization

The California Carpet Stewardship Program (the Program) has previously been referred to as the AB2398 California Carpet Stewardship Plan. Due to the passage of new legislation, the program is now called the California Carpet Stewardship Program.

The California Carpet Stewardship Plan (the Plan) is authorized by California Assembly Bill (AB2398) to implement measures to achieve measurable improvements in the landfill diversion and recycling of post-consumer carpet. AB2398 was signed into law by the governor of California on September 30, 2010.

In October 2017, California Governor Jerry Brown signed into law AB1158 placing additional requirements on any Carpet Stewardship Organization (CSO). Key Changes to the law include:

- Achieve 24% recycling rate by January 1, 2020 and meet or exceed annually thereafter;
- Incentivize (grants or subsidies) materials that have the “highest recyclability”;
- Supply all data necessary for CalRecycle to evaluate effectiveness of program;
- The Program cannot use funds to pay penalties or litigation against the state;
- The Program cannot pay subsidies for kiln, waste to energy (WtE), carpet as alternative fuel (CAAF) or incineration;
- All state projects must be managed in a way consistent with carpet stewardship laws;
- Department of General Services must publish minimum post-consumer carpet (PCC) content specs for purchases of carpet by 7/1/18;
- Must increase diversion and increase collection;
- Must increase collection convenience;
- Must expand and incentivize markets for products made from PCC;
- Must increase processor capacity, including in California;
- Must increase recyclability of carpet;

- Must describe measures that enable source reduction, source separation & processing to segregate & recover recyclable materials, environmentally safe management of materials that cannot feasibly be recycled; and
- Must provide incentives or grants to state-approved apprenticeships programs for training apprentices and journey-level installers in proper practices for recycling PCC.

Collectively, AB2398 and AB1158 are referred to as the carpet stewardship laws. Approved regulations are found in Title 14, Division 7, Chapter 11.

The Plan became effective on July 1, 2011 and is managed by the Carpet America Recovery Effort, Inc. (CARE). The Plan is a set of guidelines that CARE uses to administer the Program. The Plan was developed by CARE and an initial plan document was conditionally approved by the California Department of Resources Recycling and Recovery (CalRecycle). A revised stewardship plan document (version 3.2.2) was approved by CalRecycle on January 21, 2014 and plan amendments on January 5, 2015 (Addendum #1), October 21, 2015 (Addendum #2), and January 26, 2016 (Addendum #3). Collectively this Plan was referred to as Version 3.2.2.

On October 16, 2018, CalRecycle conditionally approved CARE's 5-Year Plan for 2018-2022 and gave CARE 60 days to resubmit addressing findings of non-compliance. On February 19, 2019, the revised Plan was approved by CalRecycle. Version 3.2.2 continued in force and CARE continued to manage the Program until the new Plan was approved.

CARE was the sole carpet stewardship organization until April 1, 2015. At that time other organizations could apply for status as a "Carpet Stewardship Organizations". As of August 26, 2020, no other Carpet Stewardship Organizations have submitted a Plan or approved.

The carpet stewardship laws require carpet manufacturers or retailers to collect an assessment based on the square yardage of carpeting sold in California. CARE mill members participating under the Plan collect the funds from California retailers. Mills (manufacturers) submit funds directly to CARE quarterly based on reported yards sold in the prior quarter. CARE disburses the proceeds in accordance with the Plan.

Disbursements are to promote carpet recycling in California and cover the costs of administering the Plan. The primary use of funds is to carpet recyclers who are paid by the pound of qualifying products that are processed and subsequently sold.

Manufacturers or retailers participate voluntarily in the Plan; however, the carpet stewardship laws require that they participate in CARE's Plan, or development and implement their own Carpet Stewardship Plan.

CARE does not have authority to levy penalties on Manufacturers or Retailers that are not compliant with the carpet stewardship laws. That authority belongs solely to the state of California.

Financial Statement Presentation and Basis of Accounting

The Program maintains its accounts on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (GAAP). Under GAAP, the Program is required to report information regarding its financial position and activities according to two classes of net assets: net assets without donor restrictions and net assets with donor restrictions based on stipulations made by the donor. Net assets that are not subject to donor-imposed restrictions including the carrying value of all property and equipment are recorded as net assets without donor restrictions. Items that affect (i.e., increase or decrease) this net asset category include program revenue and related expenses associated with the core activities of the Program. In addition to these exchange transactions, changes to this category of net assets include investment income and contributions without donor restrictions. The Program had no net assets with donor restrictions as of December 31, 2019 or 2018.

Property and Equipment

The Program follows the practice of capitalizing all expenditures for property and equipment in excess of \$500. Donated property and equipment are stated at cost or estimated fair value at time of donation. Depreciation is computed using the straight-line method over the assets' estimated useful lives as stated below. For the years ended December 31, 2019 and 2018, the estimated useful life of computer equipment is three years.

Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Revenue Recognition

Revenue from carpet recovery assessments is recognized during the calendar quarter the carpeting is sold by a manufacturer that is a participant in the Plan. Manufacturers report their sales on a quarterly basis. Reports and payments are due within 30 days following the close of each quarter. The assessment is \$.35 per square yard. The carpet stewardship assessment is added to the wholesale price of carpet, and it is passed through until it reaches the retail consumer.

Functional Allocation of Expenses

The costs of providing the various programs and other activities have been summarized on a functional basis in the statement of activities. The statement of functional expenses presents the natural classification detail of expenses by function. The financial statements report certain categories of expenses that are attributed to both program and supporting function. Therefore, some expenses require allocation on a basis that is reasonable based on the nature of each category. The expenses that are allocated include salaries and wages, benefits and payroll taxes, collection program, communications (E&O), professional services, legal expenses, facilities, leases, program travel expenses, bank service charges, dues and subscriptions, office expenses, telephone insurance and miscellaneous.

Cash and Cash Equivalents and Concentration of Credit Risk

Cash and cash equivalents are comprised of demand deposit accounts. For purposes of the statements of cash flows, the Program considers all short-term, interest-bearing deposits with maturities of three months or less to be cash equivalents. Cash and cash equivalents consist of deposits with one financial institution as of December 31, 2019 and 2018. The amounts that exceed federally insured limits are secured by investment portfolio securities of the bank.

New Accounting Policies

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers, Topic 606*. The core principle of Topic 606 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This pronouncement requires retrospective application.

In November 2016, FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230), Restricted Cash*, which requires the statement of cash flows to explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The guidance requires retrospective application.

In June 2018, FASB issued ASU 2018-08, *Not-for-Profit Entities (Topic 958) Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made*. This new standard clarifies and improves the scope and the accounting guidance for contributions received and contributions made. The guidance in this update should be applied on a modified prospective basis. Retrospective application is permitted.

The above guidelines became effective and were adopted by the Program for the year ended December 31, 2019. Accordingly, the financial statements as of and for the year ended December 31, 2018 have been restated to conform to this new guidance. These new accounting policies did not affect total net assets for either the year ended December 31, 2019 or 2018.

2. Liquidity and Availability of Financial Assets

The Program is substantially supported by assessments charged to California consumers and paid to retailers. CARE mill members collect these assessments from the retailers which are submitted to the Program. Consistent with California law, the assessment per unit of carpet sold in the state of California is an amount that cumulatively will adequately fund the plan. The Program does not have any income with donor restrictions. Accordingly, related financial assets are all available to the Program for its general expenditures. General expenditures may be incurred for program or administrative purposes.

The Program's financial assets available within one year after this date to satisfy liabilities at this date and for future general expenditure are as follows at December 31:

Description	2019 (\$)	2018 (\$)
Cash and cash equivalent	17,182,039	13,461,519
Assessments receivable, net	6,417,019	4,959,485
Financial assets available to meet cash needs for general expenditures within one year	23,599,058	18,421,004

The Program structures its financial assets to be available as its general expenditures, liabilities, and other obligations become due. In addition to financial assets available to meet general expenditures over the next twelve months, the Program operates with a balanced budget and anticipates collecting sufficient revenue to cover general expenditures. Refer to the statement of cash flows which identifies the sources and uses of the Program's operating cash and shows cash provided by operations for the fiscal year.

Subsequent to December 31, 2019, the global coronavirus pandemic threatened to deeply harm global growth. This has affected the U.S. and global equity markets, as well as consumer confidence, and the broad U.S. and global stocks market have experienced extreme volatility since December 31, 2019. It is uncertain how this downturn in the financial markets and consumer confidence may affect the operations,

investments, funding and contribution income of nonprofit organizations in the near future.

3. Assessments Receivable, Net

Assessments receivable consists of carpet recovery assessments due from Plan participants. As of December 31, 2019 and 2018, management has established an allowance for doubtful accounts of \$175,502, a result of one of the member mills' bankruptcy claim filed in 2017. The remaining accounts receivable are considered collectible in full and no additional allowance is deemed necessary. Regarding the status of the bankruptcy claim there is ongoing litigation regarding this matter including any final distributions to be made to creditors. As of December 31, 2019, no distributions have been received from the Bankruptcy Trustee for the Q2 assessment.

4. Commitments and Contingencies

During the years ended December 31, 2019 and 2018, the Sustainable Funding Oversight Committee (SFOC) allocated \$2,396,984 and \$3,484,376, respectively, to support grants. The actual amount of reimbursements is expected to differ from the authorized amounts depending on the number of applicants, projects selected, changes in project scope, and grantees' ability to meet contract obligations. As of December 31, 2019, \$1,068,239 remains committed for the grants committed during the year ended December 31, 2018 and \$1,104,007 remains committed for the grants committed during the year ended December 31, 2019

CalRecycle has presented an accusation covering CARE's performance during fiscal years 2013, 2014 and 2015. CalRecycle sought penalties in the amount of \$182,500, \$1,460,000, and \$1,642,500 from CARE for the three years in question, totaling \$3,285,000. Initial litigation at the administrative level has concluded with a finding against CARE of \$182,500, \$273,750, and \$365,000 for a total of \$821,250. CARE has rejected this ruling and filed an appeal with the State of California.

CalRecycle has also made an accusation against CARE for fiscal year 2016. CalRecycle is seeking a penalty of approximately \$1,830,000. A preliminary ruling has been issued to reduce the penalty to \$750,000. This ruling has been rejected by CalRecycle and is currently in appeal with the State of California.

The Program's liability under the above referenced litigation remains unknown as of the date of issuance of these financial statements. Therefore, no amounts have been recorded in the accompanying financial statements.

5. Related Parties: Industry Affiliate and Other

The Program is administered by the Carpet America Recovery Effort, Inc. (known by the trade name “CARE”). CARE was established in 2002 to represent the carpet industry’s effort to support market-based carpet recycling solutions. CARE is a not-for-profit, 501(c)(3) organization that was formed to oversee and enable market-based solutions for the recovery and recycling of post-consumer carpet.

To participate in the Program, manufacturers and retailers must maintain a membership in good standing with CARE. Recyclers who wish to receive disbursements must also maintain a membership in good standing to receive funds.

The primary organizer of CARE was the Carpet and Rug Institute, Inc. (known by the trade name “CRI”). CRI is a 501(c)(6) organization and is the primary trade group of the carpet industry. CRI initiated CARE’s organization as the entity to represent, promote the industry’s carpet recycling efforts and to manage the industry’s recycling programs.

CARE was created in dialog with the U.S. Environmental Protection Agency (EPA), several States, non-governmental organizations (NGOs), and carpet industry members as a result of a Memorandum of Understanding signed January 8, 2002.

CRI acts as an advocate of the carpet industry and actively works on representing its interest on legislative, regulatory, and judicial issues at the federal, state, and local levels. CRI played an active role in the development of the AB2398 legislation in California, and actively lobbies for the carpet industry in other states considering similar product stewardship or extended producer responsibility (commonly referred to as EPR) legislation.

CARE and CRI share one common non-voting director and facilities and they provide administrative and technical support to each other and the Program.

Under the carpet stewardship laws, CARE is allowed to be reimbursed for costs it incurs administering its Carpet Stewardship Plan. Costs incurred directly by the Program are paid from Program funds. Shared labor and other costs of the Program and CARE are systematically allocated and periodically settled. These shared labor costs totaled \$707,866 and \$639,184 for the years ended December 31, 2019 and 2018, respectively.

The Program has accounts payable of \$128,460 and \$72,911 due to CARE as of December 31, 2019 and 2018, respectively for expense paid by CARE but incurred by the Program.

Some of the members of the Board of Directors work for various organizations that receive subsidies from the Program. Management does not believe the risk of undue influence associated with these relationships is significant.

6. Concentrations

For the years ended December 31, 2019 and 2018, three carpet manufacturers accounted for approximately 76% and 78% respectively of the carpet recovery assessments. These manufacturers also accounted for 79% and 77% of assessments receivable at December 31, 2019 and 2018, respectively.

7. Subsequent Events

Management has evaluated events and transactions which occurred through August 26, 2020, which was the date the financial statements were available to be issued. Other than the subsequent event reported in Note 2, there are no other significant subsequent events requiring recognition or disclosure in the financial statements.

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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT
OF
FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH
GOVERNMENT AUDITING STANDARDS

To the Board of Directors
of The California Carpet Stewardship Program:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of The California Carpet Stewardship Program, (the Program), which comprise the statements of financial position as of December 31, 2019 and 2018 and the related statements of activities, functional expenses, and cash flows for the year then ended, and the related notes to the financial statements and have issued our report thereon dated August 26, 2020.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Program's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Program's internal control. Accordingly, we do not express an opinion on the effectiveness of the Program's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control

that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Program's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* except for the CalRecycle accusations included in Note 4 of the Program's financial statements.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the organization's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the organization's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Brooks, McAnnis & Company, LLC

Atlanta, Georgia
August 26, 2020

THE CALIFORNIA CARPET STEWARDSHIP PROGRAM
SCHEDULE OF FINDINGS AND RESPONSES
DECEMBER 31, 2019 AND 2018

Section I – Summary of Audit Results

Financial Statements:	Unmodified
Internal Control over Financial Reporting:	
<ul style="list-style-type: none"> • Material weakness(es) identified? No • Significant deficiencies identified that are not considered to be material weaknesses? None noted 	
Noncompliance material to financial statements noted?	No

Section II – Financial Statement Findings

No findings to report in this section.

Section III – Compliance Findings

There were no instances of noncompliance or other matters to disclose expect for the CalRecycle accusations included in Note 4 of The California Carpet Stewardship Program’s financial statements.

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10.13.2 Independent Auditor's Report on State Compliance Requirements

Compliance

We have audited Carpet America Recovery Effort Inc.'s (CARE) compliance with the requirements specified in the State of California's Code of Regulations, Title 14, Division 7, Chapter 11, Article 1 applicable to CARE's statutory requirements identified below for the year ended December 31, 2019.

We have also audited the basic financial statements of The California Carpet Stewardship Program (the Program) as of and for the year ended December 31, 2019 and have issued our report thereon dated August 26, 2020.

Both audits were conducted in accordance with auditing standards generally accepted in the United States of America and the standards applicable to audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

CARE's management is responsible for the Program compliance with laws and regulations. In connection with our audits referred to above, we selected and tested transactions and records to determine compliance with state laws and regulations applicable to CARE's program.

Auditor's Responsibility

Our responsibility is to express an opinion on CARE's compliance based on our audit. We conducted our compliance audit in accordance with auditing standards generally

accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States; and the State of California's Code of Regulation, Title 14, Division 7, Chapter 11, Article 1 applicable to CARE's statutory requirements. Those standards and the State of California's Code of Regulations require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a material effect on the statutory requirements listed below occurred. An audit included examining, on a test basis, evidence about CARE's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of CARE's compliance with those requirements.

In connection with the audit referred to above, we selected and tested transaction and records to determine CARE's compliance with state laws and regulations including, but not limited to, the following applicable items:

Performance Goals and Activities

Description	Audit Procedures Performed	Compiled
List each compliance requirement – Measurement methods accurately identify:	(Yes/No)	(Yes/No)
a. Amount of California carpet that is diverted to landfills	Yes	Yes
b. Amount of California carpet that is processed in new commodity	Yes	Yes
c. That California carpet is managed in a manner consistent with the state's waste management hierarchy.	Yes	Yes
d. Amount of California carpet discarded each year (estimated using a formula based on sales). Assumption used in the formula are appropriate for California.	Yes	Yes

Financing Mechanisms

Description	Audit Procedures Performed	Compiled
List each compliance requirement	(Yes/No)	(Yes/No)
a. Assessments are paid to CARE on all carpet sold in the state of California at the rate indicated in the Plan (i.e., 5 or 10 cents per sq. yd).	Yes	Yes
b. The assessments collected for the Program are only spent on the program.	Yes	Yes
c. The payments are accurately presented by categories found in the Regulations, Section 18944 (7). Annual Report Compliance Criteria, Financing Mechanism.	Yes	Yes
d. The annual report accurately presents information.	Yes	Yes

Program Performance Measurement

Description	Audit Procedures Performed	Compiled
List each compliance requirement	(Yes/No)	(Yes/No)
a. Applicants applying for incentive payments submit documentation as required in the Plan (and Agreed Upon Procedures) that are in place at the time documents are submitted.	Yes	Yes
b. CARE is tracking information needed to include in Annual Report per regulations Section 18944.	Yes	Yes
c. CARE's practices support a level playing field among those requesting Program funds.	Yes	Yes
d. CARE has a method to determine the effectiveness of educational and outreach activities that is appropriate for use in California.	Yes	Yes

Opinion

In our opinion, CARE complied, in all material respects, with the compliance referred to above that are applicable to the statutory requirements listed above for the year ended December 31, 2019.

This report is intended solely for the information of the Board of Directors of the Carpet America Recovery Effort, Inc. and CalRecycle and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Brooks, McInnis & Company, LLC

Atlanta, GA
August 26, 2020

10.13.3 SAS 114 Letter 2019 for California Carpet Stewardship Program

Brooks, McGinnis & Company, LLC
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August 26, 2020

We have audited the financial statements of The California Carpet Stewardship Program (the Program), for the year ended December 31, 2019 and 2018 and have issued our report thereon dated August 26, 2020. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated March 4, 2020. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Matters

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Program are described in Note 1 to the financial statements.

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers, Topic 606*. The core principle of Topic 606 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This pronouncement requires retrospective application.

In November 2016, FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230), Restricted Cash*, which requires the statement of cash flows to explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The guidance requires retrospective application.

In June 2018, FASB issued ASU 2018-08, Not-for-Profit Entities (Topic 958) Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made. This new standard clarifies and improves the scope and the accounting guidance for contributions received and contributions made. The guidance in this update should be applied on a modified prospective basis. Retrospective application is permitted.

The above guidelines became effective and were adopted by the Program for the year ended December 31, 2019. Accordingly, the financial statements as of and for the year ended December 31, 2018 have been restated to conform to this new guidance. These new accounting policies did not affect total net assets for either the year ended December 31, 2019 or 2018.

We noted no transactions entered by the Program during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

- The functional expense category allocations for benefited program or supporting service.
- The depreciable lives of fixed assets.
- The allowance for uncollectible accounts receivable.

We evaluated the key factors and assumptions used to develop the estimates in determining that it is reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to the financial statement users. The most sensitive disclosures affecting the financial statements were:

- The disclosure in Note 2 concerning liquidity and availability of financial assets to fund future general expenditures and the Program's management of cash flow to meet financial obligations in the next twelve months.

Difficulties Encountered in Performing the Audit

We encountered no difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely adjustments identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. There was one reclassification adjustment for financial statement purposes only which was not material, either individually or in the aggregate to the financial statements taken as a whole. There were no other audit adjustments.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated August 26, 2020.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Program's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Program's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

In planning and performing our audit of the financial statements of The California Carpet Stewardship Program (the Program) as of and for the years ended December 31, 2019

and 2018, in accordance with auditing standards generally accepted in the United States of America, we considered the Program's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Program's internal control. Accordingly, we do not express an opinion on the effectiveness of the Program's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency or a combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the Program's financial statements will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that were not identified.

We have included below an update to a prior year comment involving internal controls that is an opportunity and suggestion for strengthening internal controls even further and improving operating efficiency.

During the prior year audit, we noted that there were no documented procedures regarding the allocation of salaries and other shared expenses. We recommended that the expense allocation methodology be documented in writing and evaluated and updated annually. During the current year audit, we noted management has adequately documented procedures regarding allocation of expenses in a formal accounting policy. We consider this matter to be resolved. We have no current year comments.

This information is intended solely for the use of The California Carpet Stewardship Program and management of the Program and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

Brooks, McAnnis & Company, LLC