

California Carpet Stewardship Plan 2017–2021

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Submitted by:

Carpet America Recovery Effort (CARE)

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Submitted to:

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Acknowledgments

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Plan Submittal

Pursuant to the requirements of AB 2398, the manufacturers of carpet sold in the State of California (Carpet Mills) submit this carpet stewardship Plan to CalRecycle, per Public Resource Code (PRC), Section 42972. CARE, as the designated stewardship organization of the Carpet Mills selling carpet into California, respectfully requests CalRecycle’s approval of this Plan. Pursuant to Section 42973, CalRecycle may approve this Plan only if CalRecycle “makes both of the following findings: (A) The plan will not have the effect of reducing the level of diversion and recycling of postconsumer carpet that has been achieved pursuant to this chapter at the time the department reviews the plan. (B) The amount of the assessment in the plan will not create an unfair advantage in the marketplace for one or more of the companies in the organization.”

CARE has responded strategically, aggressively, and repeatedly in an effort to influence growth of the carpet recycling industry. The global polymer supply chain is complex, sophisticated, unregulated, and intensely competitive. There are multiple competitive sources of these materials including virgin, post-industrial, pre-consumer, and post-consumer polymer from dozens of industries representing hundreds of products.

An outline of these factors may be found in the 2015 CARE Annual Report to CalRecycle and is incorporated by reference. It is the intent of CARE to point out the factual elements that govern our ability as a small enterprise to influence the markets for recycled polymeric materials. The State has seen firsthand these same headwinds manifested as a drop in its statewide recycling rate to 47% in 2015. We face this challenge together, and it makes great sense to continue to collaborate on our path forward to success as we work to evolve and enhance this Plan.

As this Plan demonstrates that current levels of diversion and recycling will increase in the next 5 years and will not, at the current level of assessment, create an unfair advantage in the marketplace, it meets two of the key requirements established by the law for approval of this Plan by CalRecycle.

Respectfully submitted,



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A. Contact Information

Designated Stewardship Organization

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Carpet America Recovery Effort (CARE) is the designated stewardship organization of the Carpet Mills and is responsible for submitting this Plan. CARE is a 501(c)(3) nonprofit organization. CARE 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, and entrepreneurs. California Assembly Bill 2398 required CARE to serve as the carpet stewardship organization until April 1, 2015, and CARE is continuing in that role with the support of all qualified Carpet Mills.

CARE is the facilitator and networker for the market-based system for post-consumer carpet recycling across the United States. CARE actively supports its members—including entrepreneurs, the carpet industry, government entities, and nongovernmental organizations—to achieve its mission. CARE’s mission is to advance market-based solutions that increase landfill diversion and recycling of post-consumer carpet, encourage design for recyclability, and meet meaningful goals as approved by the CARE Board of Directors. CARE’s vision is that post-consumer carpet diversion and recycling are economically, socially, and environmentally sustainable for all stakeholders.

CARE Leadership

The **CARE Board of Directors** currently includes 19 members. Board members are unpaid, and they compose a multi-stakeholder group consisting of representatives of the carpet industry, entrepreneurs, government, the plastics industry, and suppliers to the carpet industry. For a list of current board members, see *Attachment 2. CARE Leadership* or CARE’s website (www.carpetrecovery.org/about/about-care).

A. CONTACT INFORMATION

California Carpet Stewardship Plan 2017–2021

The California Carpet Stewardship Plan and Program is overseen by the **Stewardship Planning Committee (SPC)** and the **Sustainable Fund Oversight Committee (SFOC)**. The SPC and SFOC are empowered by the CARE board in their oversight role and include both industry and entrepreneur representatives. Currently, one member of the SPC and SFOC represents a California-based business. A list of SPC and SFOC representatives is included in *Attachment 2. CARE Leadership*.

Under the oversight and direction of the SFOC and SPC, the CARE team of staff and contractors are responsible for all aspects of program implementation.

Participants in the CARE California Carpet Stewardship Plan

In 2011, the Carpet Mills elected to submit its original plan under AB 2398 for a 5-year period ending December 31, 2016; the Carpet Mills have elected to submit this updated Plan for an additional 5-year period through 2021. This Plan will build upon and enhance the California Carpet Stewardship Program (Program) which has been in place since 2011. For purposes of clarity, the Program refers to the overall effort pursuant to AB 2398 to divert and recycle post-consumer carpet, while this Plan is focused on the structure and elements of the Program for the next 5 years. As of August 2016, the Program includes 75 Carpet Mills as participants covered under this Plan. *Attachment 4. California Carpet Stewardship Plan Participants* provides a list of Carpet Mill participants in the California Carpet Stewardship Plan.

The Program maintains detailed up-to-date contact information for the list of registered Carpet Mills covered in the California Carpet Stewardship Plan and associated Program. On a regular basis, typically quarterly, the Program submits to CalRecycle the list of registered Carpet Mills. CalRecycle posts the official list of registered Plan participants on the CalRecycle website (www.calrecycle.ca.gov/carpet/) in compliance with AB 2398.

The Program, by statute, also requires participating Carpet Mills to submit a list of brands, including private labels, to the Program on a quarterly basis. Brand listings are maintained separately from Carpet Mill listings to preserve any competitive business information. The Program works in partnership with CalRecycle enforcement staff to keep these listings up to date.

The Program follows a standard process for registering Carpet Mills and other participants. In addition to Carpet Mills, the Program involves collector/sorters, processors, and manufacturers, as described in subsequent chapters of this Plan. All participants are required to be CARE members in good standing and to maintain a current signed legal agreement which outlines contractual compliance requirements, and meet other Program requirements, including Agreed Upon Procedures (AUPs). Participant support documents, such as welcome package, registration, and reporting procedures, are available on the Program website or by request to CARE.

B. Scope

This chapter presents an overview of the scope of the California Carpet Stewardship Plan. As called for in AB 2398, the Plan is designed to accept and manage all applicable post-consumer carpet, regardless of polymer type or primary materials of construction. The Plan follows the standard outline presented in Section 18942 of the California Code of Regulations, Title 14, Chapter 11, Article 1.0, *Product Stewardship for Carpets*, and is organized into the following chapters:¹

- **A. Contact Information**—describes CARE and provides its contact information as the designated stewardship organization, along with CARE’s leadership and participants in the California Carpet Stewardship Program.
- **B. Scope**—provides an overview and orientation to the key elements of the Plan (this chapter).
- **C. Performance Goals and Activities**—presents the six main goals the Program is designed to achieve as well as measurement information; also describes source reduction reporting.
- **D. Solid Waste Management Hierarchy**—describes how the Plan’s approach to managing carpet aligns with California’s solid waste management hierarchy and supports preferred methods.
- **E. Collection System**—summarizes California’s collection system for carpet and the process for collection, sorting, reuse, processing, and manufacturing into recycled content products.
- **F. Market Development**—describes the Plan’s approach to increasing markets for collection, processing, and manufacturing of carpet through subsidies, incentives, grants, research and development (R&D), technical assistance, education & outreach (E&O) and other program elements as deemed appropriate in response to market dynamics.
- **G. Financing Mechanism**—presents the Program’s approach to financing, including the assessment level effective January 2017, and the first budget overview for this Plan; the budget is subject to modification and future development to address market conditions and meet goals.
- **H. Education and Outreach**—summarizes education, outreach, and marketing activities aimed at multiple stakeholders, including retailers, installers, local government, state agencies, collection sites, nongovernmental organizations, contractors, facilities managers, Carpet Mills, and the public in support of all program goals.
- **I. Program Performance Measurement**—lists the metrics that will be used in tracking and managing the Program’s performance over time, including annual reporting.
- **J. Stakeholder Consultation**—describes the stakeholder engagement involved in developing this Plan, including convening a California Council on Carpet Recycling (Council), stakeholder

¹ Table 1 at the end of this chapter lists key sections of the Public Resource Code Section 42970 and Title 14, Article 1, of the California Code of Regulations and identifies the chapters where they are addressed in this Plan.

workshops and online feedback, as well as ongoing stakeholder consultation anticipated over the course of the Plan.

- **K. Audits**—explains how the Program will meet its regulatory responsibilities for required auditing of both the California Carpet Stewardship Program and the CARE organization.
- **L. Environmental Information**—briefly references CalRecycle’s previous finding in 2012 that the Program has no significant adverse effect on the environment.
- **Attachments**—includes additional reference materials relevant to the California Carpet Stewardship Plan and Program. Additional program materials referenced throughout this document may be available on the Program website <https://carpetrecovery.org/california/> or by request to CARE.

This California Carpet Stewardship Plan represents extensive work by and engagement with CARE, its committees, the new California Council on Carpet Recycling, CalRecycle, and other industry and public stakeholders. This Plan covers the five-year period from 2017–2021; in the interim period, we anticipate that any needed updates will be made through an Addendum process with CalRecycle. Pursuant to PRC Sections 42970 and 42972, this Plan achieves the purposes of AB 2398, to the extent feasible based on available technology and information, by continuing to increase diversion of carpet from landfills and recycle carpet and/or its constituent parts into secondary products.

The California Carpet Stewardship Plan is subject to the dynamic market conditions that affect all global industries and recycling commodities as a whole. As such and as required by AB 2398, the Plan seeks to stimulate the marketplace through subsidies and other incentives, while relying on traditional business and investment practices to drive recycling infrastructure and capacity to support the Plan. In keeping with the statutory structure, this Plan is not designed to cover the full cost of recycling or to otherwise manage post-consumer carpet; instead the Plan embraces the statutory mandate of a market-driven approach in which Program funds are used to encourage markets to become self-sustaining within the traditional market framework and maintain fair market conditions for carpet products. The past five years have provided key lessons: recycle markets are not only dynamic, but often unpredictable and coupled with global supply chains outside the control of CARE, and thus difficult to manage. The Carpet Mills and CARE have learned from this experience and, to this end, have built in flexibility and responsiveness as essential elements of this Plan.

Carpet recycling infrastructure is limited both within California and nationwide. Today, infrastructure outside of California plays a vital role in processing material collected and managed in California, as current in-state capacity is insufficient to manage all post-consumer carpet generated in California. Launched in 2015, the Program’s grant efforts are supporting a drive for doubling of the capacity of in-state resources supporting collection, processing, and manufacturing of secondary recycled content products. Market development is also a critical activity as having healthy markets into which to sell products manufactured with post-consumer carpet are essential to a sustainable collection system. Infrastructure will need to continue to expand capacity as demand for California post-consumer carpet grows in the years ahead. CARE supports the growth of California’s carpet recycling infrastructure

through various strategies, including the subsidies, technical support, market and product development activities, and grant program outlined in this plan.

The Program has made numerous meaningful improvements over time by increasing the number of Program-supported public drop-off sites to collect used carpet for recycling, expanding face-to-face visits with retailers, grant-funded projects, initiation of installer training, and overall participants in the Program. The Program sees upward trends in the pounds of carpet recycled, reuse of both tile and broadloom carpet, carpet collections, and use of materials recovered from carpet in new recycled carpet content products. Despite challenging global recycling conditions in 2015 and 2016, markets are beginning to rebound, and new technology and products are developing, through the support of the Program's incentives. We have seen a steady increase in recycled output in 2016 and this Plan reflects and builds on those improvements.

Program goals will be accomplished through the implementation of flexible and targeted incentives that seek to stimulate market-based solutions.

This Plan will incorporate goals that, to the extent feasible based on available technology and information, increase the recyclability of carpets and incentivize the market growth of secondary products made from post-consumer carpet. The goals established in this Plan will continue to build on the goals and performance of the plan submitted in 2011. The Plan is designed to support the following Program goals:

1. Increase the recyclability of carpets.
2. Incentivize the market growth of secondary products made from post-consumer carpets.
3. Increase the reuse of post-consumer carpet.
4. Increase the recycling of post-consumer carpets.
5. Increase the diversion of post-consumer carpet from landfills.
6. Provide for reasonably convenient collection opportunities in each county.

Drawing on input from the California Council on Carpet Recycling obtained in four meetings held in 2016, as summarized in Attachment 9, the Plan identifies the following potential strategy areas for accomplishing the Program goals. Budget allocations in Year 1 (2017) of this Plan are focused primarily on subsidies. Some strategy areas are currently referenced without specific budgetary allocations but may be activated over the course of the Plan based on progress toward Program goals, changes in market conditions or other Program needs. The consideration and decision-making process for activating or adjusting these various strategy areas will generally employ the following sequence: 1) submit to SPC for review, 2) consult the Council, 3) review with CalRecycle and seek approval if appropriate, and 4) implement after final approval by the SFOC. As recommended by CalRecycle and from experience gained in prior years, the Plan incorporates significant flexibility in its operation and execution of these strategy areas, allowing CARE to react quickly and efficiently to changing market conditions that history has instructed we can expect in the next 5-year period.

- Subsidies
- Grants
- Other Financial Incentives
- Research and Development (R&D)
- Technical Assistance
- Education and Outreach
- Collection, Systems, and Staffing

Please refer to the *California Council on Carpet Recycling* section that begins on page 70 for more detail on incorporation of Council ideas.

Table 1. Pertinent Statutory and Regulatory Language and Corresponding Chapters

Statutory and/or Regulatory Language	Corresponding Plan Chapter
<p>CCR Sec. 18942(b). The stewardship plan must be submitted electronically according to instructions provided by the department. A hard copy signed by a corporate officer of a manufacturer or stewardship organization, under the penalty of perjury, must also be submitted to the department.</p>	<p>Entire Plan</p>
<p>PRC §42972(a)(2). Include goals that, to the extent feasible based on available technology and information, increase the recycling of postconsumer carpet, increase the diversion of postconsumer carpets from landfills, increase the recyclability of carpets, and incentivize the market growth of secondary products made from postconsumer carpet. The goals established in the plan shall, at a minimum, be equal to the goals established in the CARE MOU, if it has been adopted at the time the plan is submitted to the department.</p> <p>Regulatory requirement California Code of Regulations (CCR) Title 14, Division 7, Chapter 11, Article 1.0, §18943(a)(3): The program described in the stewardship plan shall contain a set of performance goals and criteria that include, but are not limited, to the following items:</p> <p>(A) Performance goals, which shall be numeric as noted, and include a description of how program goals will be achieved for the following categories:</p> <ol style="list-style-type: none"> 1. Increase the recyclability of carpets. 2. Incentivize the market growth of secondary products made from post-consumer carpets. 3. Increase the reuse of post-consumer carpets (numeric goal). 4. Increase the recycling of post-consumer carpets (numeric goal). 5. Increase the diversion of post-consumer carpet from landfills. <p>CCR §18943(a)(3)(C). Baseline and measurement methods for each goal.</p>	<p>C. Performance Goals and Activities</p>

Statutory and/or Regulatory Language	Corresponding Plan Chapter
<p>PRC §42970. The purpose of this chapter is to increase the amount of postconsumer carpet that is diverted from landfills and recycled into secondary products or otherwise managed in a manner that is consistent with the state’s hierarchy for waste management practices pursuant to Section 40051.</p> <p>PRC §42972(a)(3). Describe proposed measures that will enable the management of postconsumer carpet in a manner consistent with the state’s solid waste management hierarchy, including, but not limited to, source reduction, source separation and processing to segregate and recover recyclable materials, and environmentally safe management of materials that cannot feasibly be recycled.</p> <p>CCR §18943(a)(4): demonstrate over time source reduction, reduce, and recycling will increase, over environmentally safe transformation and land disposal.</p>	<p>D. Solid Waste Management Hierarchy</p>
<p>CCR §18943(a)(5): Describe the system that will be use to collect and properly manage post-consumer carpet.</p>	<p>E. Collection System</p>
<p>CCR §18943(a)(6): Market Development. Describe incentives or methods to increase recycling of carpet into secondary products.</p>	<p>F. Market Development</p>
<p>PRC §42972(a)(4): Include a funding mechanism, consistent with subdivision (c), that provides sufficient funding to carry out the plan, including the administrative, operational, and capital costs of the plan, payment of fees pursuant to Section 42977, and incentive payments that will advance the purposes of this chapter.</p> <p>§42972(c)(1). The funding mechanism... shall establish and provide for... a carpet stewardship assessment per unit of carpet sold in the state in an amount that cumulatively will adequately fund the plan and be consistent with the purposes of the chapter.</p>	<p>G. Financing Mechanism</p>
<p>PRC §42972(a)(5): Include education and outreach efforts to consumers, commercial building owners, carpet installation contractors, and retailers to promote their participation in achieving the purposes of the carpet stewardship plan....</p>	<p>H. Education and Outreach</p>
<p>CCR §18943(a)(9): Describe how attainment of the goals will be measured per Section 18943(a)(3)(c). Program data shall be collected for purposes of annual report submittal (see Section 18944 Annual Report Compliance Criteria). Information to be provided includes, but is not limited to: (A) Specific information on the measurement methodology, assumptions, conversion factors, if used, and data sources.</p>	<p>I. Program Performance Measurement</p>

B. SCOPE

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Statutory and/or Regulatory Language	Corresponding Plan Chapter
PRC §42972(a)(6): Include a process by which the financial activities of the organization or individual manufacturer that are related to implementation of the plan will be subject to an independent audit, which may be reviewed by the department.	K. Audits
CCR §18943(a)(12): Plans shall be accompanied with information to assist in completing an initial study under the California Environmental Quality Act.	L. Environmental Information

C. Performance Goals and Activities

This chapter describes the Program’s performance goals in the required areas, along with baseline data and methodologies. The performance goals in this Plan are designed to meet or exceed the goals established previously by achieving a 16% recycling rate by 2016 and 24% by 2020. The goals recognize changes in market conditions and anticipate future changes in recycling infrastructure and capacity growth in California.

Progress toward performance goals are reported annually within the Program’s annual report to CalRecycle and compared to baseline year and prior calendar year measurements, respectively, as established in previous annual reports. Per CalRecycle guidance, the baseline year is defined as the first 12 months of the Program implementation period, or July 1, 2011 to June 30, 2012. All subsequent annual data is presented on a calendar year basis from January 1 to December 31 of each reporting period. The Program provides interim progress report briefs to CalRecycle on a quarterly basis, highlighting key results especially related to subsidy and incentive payouts, Carpet Mill reporting, gross collection and recycling rates. The content of these quarterly reports may be adjusted over the course of this Plan. Quarterly reports are published to the CalRecycle website for the public record.

Subsequent chapters of the Plan describe in greater detail how these goals will be achieved, particularly *Chapter E. Collection System*, *Chapter F. Market Development*, and *Chapter H. Education and Outreach*.

This chapter also briefly addresses reporting on source reduction, a topic which is also covered in *Chapter D. Solid Waste Management Hierarchy*.

Many of the performance goals are measured against the estimated amount of annually discarded post-consumer carpet, or discards. The Program is tasked with managing and tracking post-consumer carpet discards, while seeking to increase recycling and diversion and support other Program goals. The following formula is used for estimating the total weight of discards.

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

- **Sales** = Sales in square yards (sq. yd.) in California sales data comes from the independent accounting firm Aprio (formerly Habif, Arogeti & Wynne) that collects the confidential sales data from the Carpet Mills registered with the Program.
- **R = Replacement rate (%)**. Percent of carpet that is replacement for existing carpet. Replaced carpet is typically destined for the landfill. In 2015, this rate was 84%, the same as 2014. The remaining 16% of carpet was purchased for new housing or commercial buildings. The rate is derived as the weighted average of the residential and commercial sectors and reported by Torcivia Market Insights, an independent market research firm.
- **P = Average weight**, in pounds, of carpet per square yard (lbs./sq. yd.). Beginning in 2016 and based on new market survey information, average weight of carpet is now 4.39 lbs./sq. yd. The Program gathers and analyzes raw industry data to calculate the weighted averages of weights of broadloom carpet and carpet tiles used in the commercial and residential sectors.

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- **D = Percent, based on weight, of carpet from demolition** projects not replaced (%). Pounds of carpet from demolition projects that was not replaced. The 2015 rate is calculated to be 0.60%, the same as 2014. (D= Sales in lbs. x rate)
- **E = Percent of carpet that is eliminated** (deselection) but not replaced by carpet. The estimate based on reviewing historical data is set at 0.75%. (E=Sales in lbs. x rate)

On an annual basis CARE conducts a confidential survey of mill participants to ascertain the average weight per square of carpet used in the formula above. In addition, CARE contracts with Market Insights to obtain an independent market analysis of California-based activity to reach a conclusion on the replacement, demolition and deselection rates in the State which inform the discards formula. The most current analysis was documented in an email to CalRecycle dated July 15, 2016. The revised data was incorporated into the formula for quarterly reporting beginning Quarter 3 of 2016.

CARE acknowledges that this formula and approach to discards, which has been in use for the last three years, results in a very different estimate than the number calculated in CalRecycle’s statewide waste characterization studies. As part of this Plan, CARE commits to facilitating meetings between CalRecycle, CARE, and CalRecycle’s contractor that conducted the studies (Cascadia Consulting Group), including a statistician, to review all relevant information and come to a reasonable conclusion regarding CARE’s accuracy in calculating discards. The goal will be to reach consensus between CalRecycle and CARE regarding the discard formula by the end of 2017.

Performance Goals

1. Increase the recyclability of carpets.

The recyclability of carpets is a measure of how easily carpets can be separated into their component parts, and ultimately recycled into a new secondary product. The challenge with recycling carpet compared to most other recyclable products is that carpet is a combination of different materials that are bound together for long-term durability and performance. These materials cannot be recycled without being separated, and they are not separated easily. When separated and adequately processed to remove residues, the components—which include face fiber, backing, adhesive, and filler—can be recycled, although some markets are better developed than others. Progress toward the Program goal of recyclability will be measured by recycled output as a portion of gross collections. *Yield* is the output from processing (shredding, shearing, hammer-milling, depolymerization, and the like) or the portion of gross collected material that is successfully converted to recycled output for use as a feedstock input for a secondary product, rather than being discarded.

Performance Goal: Increase yield to 60% by 2021.

Baseline: In the baseline year of the Program (July 2011–June 2012), the yield was 28%.

Historical Trends: Results to date are summarized below.

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Baseline (2011/2012)	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Year 4 (2015)
28% of GC	32% of GC	41% of GC	35% of GC	34% of GC

Methodology: Yield is measured by dividing the total finished recycled output by total gross collections—that is, the amount recovered before recycling. Data are collected monthly and quarterly and reported in annual reports.

Formula Used for Calculating the Yield

$$Yield = \frac{Recycled\ Output}{Gross\ Collections}$$

The factors used to calculate the *Yield* include:

- **Recycled Output** = pounds of post-consumer carpet (PCC) recovered and recycled into a feedstock for the manufacture of secondary products. Recycled output is calculated based on self-reported actual pounds of finished recycled material shipped and sold by processors to recycled content manufacturers. Collector/sorter and processors are required to maintain records of transactions, such as bills of lading, invoices and other documentation to support data reported in monthly reports. The Program or its independent accounting firm can review participant records at any time, pursuant to Agreed Upon Procedures (AUPs).
- **Gross Collections** = estimated pounds recovered before recycling. Gross collection is calculated based on self-reported estimated pounds managed by participating collector/sorters or processors. Gross collected pounds may be estimated based on historical average weights per loads. CARE may review the gross collection reporting methodology over the course of the term to evaluate the benefits of shifting to an alternative mass balance calculation method.

2. Incentivize the market growth of secondary products made from post-consumer carpets (PCC).

Market growth of secondary products is supported through targeted subsidies, growth incentives, promotion of new and existing products that use recycled carpet content to potential purchasers, as well as technical assistance to encourage manufacturers to incorporate recycled carpet content into their new or existing products. CARE has worked closely with CalRecycle staff such as Recycled Market Development Zones (RMDZ), State Agency Buy Recycled Campaign (SABRC), and Local Assistance and Market Development (LAMMD) to build awareness and support within state agencies for products that contain PCC.

CARE is working closely with tire recyclers and CalRecycle on the development of DoubleGreen™ products, which incorporate California recycled carpet plus at least one additional post-consumer material into a single product, such as both calcium carbonate (from PCC) and rubber (from recycled tires) in new products. In addition, CARE has initiated efforts with PaintCare to seek combined

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options for recycled paint and calcium carbonate. Finally, an effort is underway to build recognition of the DoubleGreen™ brand as one mechanism to build demand for recycled content products already recognized by programs such as SABRC. More broadly growing secondary products using PCC is recognized as a key component of a successful diversion and recycling strategy in this Plan. Market growth of secondary products is discussed in more detail in *F. Market Development*.

Performance Goal: Increase the number of recycled carpet content products in the marketplace by 30% by 2020 over the 2016 baseline.

Baseline: No data is available for the baseline year. As of August 2016, 25 products using post-consumer recycled carpet from California were available from 10 vendors (four of the vendors are located in California). The Program will use 2016 as the baseline for this metric, as it is the first year in which such data was collected.

Historical Trends: Results to date are summarized below.

Baseline (2011/2012)	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Year 4 (2015)	Year 5 (as of Aug 2016)
No data	No data	No data	No data	18 products 6 vendors (1 California vendor)	25 products 10 vendors (4 California vendors)

Methodology: Product catalog basis. For example, if two manufacturers both produce recycled carpet cushion, the carpet cushion product from each manufacturer would count as a separate product. Products with the same stock-keeping unit (SKU) within a company count as a single product. Product types for non-nylon recycled products are currently reported in monthly subsidy recipient reports. Additional product information will be requested through annual surveys or as needed to support procurement grants. CARE works in collaboration with recycled content manufacturers to promote available products through Buy Recycled campaigns, while maintaining confidential business information for those participants where confidentiality may be concern. Buy Recycled products information may be listed on the CARE website or other promotional materials, such as flyers.² Total weight of recycled output used in secondary products is also reported on a monthly basis (currently limited to non-nylon recycled products). These manufacturer pounds shipped and sold may be used as an additional performance indicator for market growth.

² For a current list of recycled content products, see <https://carpetrecovery.org/products/>.

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3. Increase the reuse of post-consumer carpet.

Carpet, and particularly carpet tiles, can frequently be reused when removed from one application, to be reused in another installation. Carpet tile is generally easier to reuse than broadloom carpet since broadloom carpet is cut to fit an area when installed. Facilitating reuse includes providing subsidies for broadloom and carpet tile reuse, promoting reuse avenues, such as connecting carpet removal businesses with used building material retailers (e.g., Habitat for Humanity) and encouraging the purchase of used carpet and carpet tile.

Performance Goal: Increase reuse quantities, as measured by weight, by 100% by 2021 compared to 2016.

Baseline: In the baseline year, 98,000 pounds of carpet were reused.

Historical Trends: Results to date (in pounds) are summarized below.

Baseline (2011/2012)	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Year 4 (2015)
98,000 lbs.	152,000 lbs.	26,000 lbs.	174,000 lbs.	602,000 lbs.

Methodology: Reuse subsidies are a principle strategy for creating market demand for and tracking progress in broadloom and carpet tile reuse under this Plan. Subsidy recipients report broadloom and carpet tile reuse, respectively, on a monthly basis, as well as the locations in which materials were sold or donated for reuse above a designated threshold, currently 500 pounds. Individual company data is maintained as confidential business information and is used in managing the Program and reducing the potential for fraud. The Program quantifies the amount of carpet tile and broadloom carpet that is reused and reports results annually.

4. Increase the recycling of post-consumer carpets.

Recycling carpet means transforming or manufacturing discarded carpet from consumers into usable or marketable feedstocks and products. Recognizing that CARE finished the year 2016 at ~11% carpet recycling, a goal of 26% by 2021 represents a 136% increase over 5 years. Given the challenges faced in the current markets, this goal represents both aggressive growth and continuous and meaningful improvement. Until there is confidence that the incentives and investments can deliver market outlets at a faster pace, it is not prudent to set unrealistic goals beyond those already proposed.

Performance Goal: Increase the recycling rate to 24% by 2020 and to 26% by 2021.

Baseline: In the baseline year, recycling rate was 8%.

Historical Trends: Results to date (in pounds) are summarized below.

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Baseline (2011/2012)	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Year 4 (2015)
8% of discards	10% of discards	12% of discards	12% of discards	10% of discards

Methodology: The recycling rate is measured by taking the sum of total material recycled and the total material reused divided by the total discards. Because reuse is considered a preferred management strategy higher on the waste hierarchy, the Program requested to include the pounds reused within the recycling rate in Addendum #3, approved January 2016.

Formula Used for Calculating the Recycling Rate

$$\text{Recycling Rate} = \frac{\text{Recycled Output} + \text{Reuse}}{\text{Discards}}$$

The factors used to calculate the recycling rate include:

- **Recycled Output** = material recycled (processed), shipped and sold as Type 1, Type 2, or Calcium Carbonate fines, as reported by processors
- **Reuse** = recovered, sorted, shipped and sold/donated carpet or carpet tile for reuse
- **Discards:** See the Discards formula on page 12

5. Increase the diversion of post-consumer carpet from landfills.

Diversion includes all recovered carpet, including the amounts that were reused, recycled, exported, or used for energy recovery in a kiln or waste-to-energy (WTE) facility or as carpet as alternative fuel (CAAF) to replace other fuels such as coal, natural gas, or fuel oil. In 2015, 30% of all post-consumer carpet discards were diverted from California landfills; the average has been 30.8% since the Program began. The Plan anticipates that the diversion rate will increase over time as the collections expand and recycling rates increases. The Program will continue to track and report diversion both as pounds and as a percentage of discards as performance indicators.

Performance Goal: Divert 60% of discards from landfill by 2021, a 160% increase over 2015.

Baseline: In the baseline year, 22% of discards were diverted.

Historical Trends: Diversion rate results to date (percentage of discards) are summarized below.

Baseline (2011/2012)	Year (2013)	Year (2014)	Year (2015)	GOAL (2021)
22% of Discards	19% of Discards	29% of Discards	23% of Discards	60% of Discards

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Methodology: The diversion rate is measured by dividing the total amount of diverted material by the total discards.

Formula Used for Calculating the Diversion Rate

$$\text{Diversion Rate} = \frac{\text{Net Diversion}}{\text{Discards}}$$

The factors used to calculate the diversion rate include:

- **Net Diversion** = estimated pounds of post-consumer carpet removed from California landfills for reuse, recycle, CAAF, kiln, WTE, or exported outside the state (including ex-U.S.), calculated as the difference of Gross Collections minus disposed post-consumer carpet and process waste
- **Discards:** See the Discards formula on page 12.

6. Provide for reasonably convenient collection opportunities in each county.

One of the key components of any successful recycling program is having systems in place to collect materials efficiently. Residents and businesses that generate carpet discards need drop-off recycling locations that are located conveniently close to where they live and do business. To meet the regulatory requirement of providing reasonably convenient collection, the Program has a goal of a minimum of one drop-off location per county. To meet this goal, CARE will work with local agencies to identify a suitable site within each county. This assumes a county is willing to participate as we have seen some resistance. Once the current goal is reached, the Program will conduct a convenience study to determine how far people, on average, are willing to travel to recycle carpet and if additional drop-off sites are justified.

Performance Goal: Establish a minimum of one site per county by end-2017.

Baseline: In the baseline year, there were no Program supported drop-off locations in California. In 2015, the Program expanded to support 23 drop-off sites in 22 of California’s 58 counties.

Historical Trends: Results to date (in pounds) are summarized below.

Baseline (2011/2012)	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Year 4 (2015)
0	0	6 sites 6 counties	14 sites 11 counties	23 sites 22 counties

Methodology: Measurement for this metric involves counting the active drop-off sites sponsored by the Program in each county. CARE surveys collector/sorters and processors annually to quantify the number of private collection locations as well as the total estimated pounds of gross collections, which are additional indicators of progress toward this goal. These private collection sites, run by

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individual retailers and/or collectors, are already in place. CARE will consider both program-sponsored and private drop-off sites when assessing convenience.

Source Reduction Report

Source reduction is defined as the result of using less product or material in the manufacturing and use of carpet and/or reducing the amount of discarded carpet generated. The Program will report on source reduction as part of its annual report to CalRecycle, although CARE considers source reduction to be the individual responsibility of Carpet Mills and outside the purview of this Plan.

Source reduction has been measured as the average weight per square yard of carpet, which remained stable at 4.2 pounds per square yard from 2011 to 2015 and increased to 4.39 pounds per square yard by August 2016. Accordingly, this metric may not be helpful in assessing adoption of source reduction strategies by individual Carpet Mills participating under the Plan. A challenge with this approach is that carpet tile, which is generally more recyclable than broadloom carpet, weighs more per square yard (almost twice as much). As carpet tile gains market share, particularly in the commercial sector, the average weight of carpet may increase, although the material itself may be more recyclable.

One favorable trend is a reduction in tile weight during the last several years, although it remains heavier than broadloom carpet per square yard. Other favorable trends include a company that is developing an innovative backing system that will greatly facilitate the recycling of both PET and nylon carpet. This new technology, expected to launch in 2016, offers mono-polymer and easily separable dual-polymer systems that will eliminate calcium carbonate and the latex adhesive and thus contribute to significant increases in source reduction—up to approximately 40% on average by weight per carpet square—over the coming years. As advances like these take hold in Carpet Mills, results will benefit source reduction, processing efficiency, and overall recyclability of carpet over the long term.

CARE interprets source reduction as an activity generally occurring outside of this Plan, with Carpet Mills responsible for addressing source reduction through their individual sustainability initiatives. CARE and the Carpet and Rug Institute (CRI) support the efforts of individual Carpet Mills through the following actions:

- Requesting annual submissions of report surveys for CARE’s national report.
- Publishing or linking to individual Carpet Mill sustainability reports, as reported by participating Carpet Mills.
- Forming committees to explore such topics as average weight per square yard of carpet, as led by CRI.
- Recognizing members through annual rewards such as recycler of the year, during CARE’s annual conference awards.

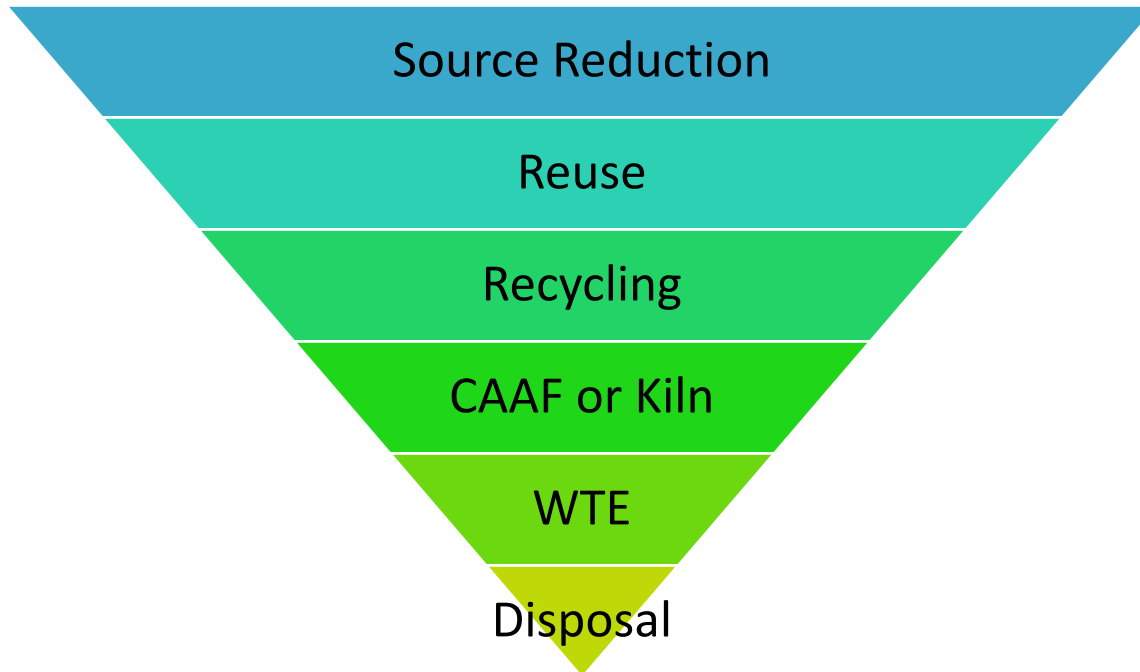
Recommendations from the CARE/CRI committee to examine improved mechanisms to evaluate source reduction will guide future efforts to advance and measure this Program goal.

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D. Solid Waste Management Hierarchy

The proposed measures in this Plan enable the management of post-consumer carpet (PCC) in a manner consistent with California’s solid waste management hierarchy and the requirements of AB 2398. The elements of the solid waste management hierarchy for carpet include the following, as described further below:



1. Source reduction
2. Reuse
3. Recycling
4. Carpet As Alternative Fuel (CAAF) or cement kiln fuel/feedstock
5. Waste-to-Energy (WTE)
6. Landfill, incineration, or other disposal

The Plan is designed to increase reuse, recycling and diversion over time and to reduce the amount of post-consumer carpet that must be disposed by landfilling. It is designed to ensure that the preferred approaches of source reduction, reuse, and recycling handle more materials and grow at a higher rate than other forms of post-consumer carpet management, including energy recovery (CAAF, kiln, and WTE), over the long-term. The Plan places particular emphasis on carpet recycling. Diversion includes reuse, recycling, export, and energy recovery (CAAF, kiln and WTE). In addition, carpet cushion that is often collected along with carpet recycling is tracked for informational purposes by the Program. While carpet cushion is not considered in the recycled output calculation, it clearly contributes to reducing the flow to California landfills equivalent to approximately 2 pounds/square yard, providing an additive

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benefit in supporting California’s overall diversion and recycling goals. The materials management methods in the solid waste management hierarchy are described further below.

Source Reduction

Source reduction for carpet is defined in this Plan as the result of using less product or material in manufacturing and use of carpet or reducing the amount of discarded carpet generated. Carpet Mills are working to reduce the amount of natural resources used in making carpet, including carpet tiles, as described above on page 19 in the *Source Reduction Report* section.

Carpets have been designed and engineered to be highly durable. Many examples exist of carpet that has remained in operation for decades, such as in schools. Within the industry, it is often said that carpets “ugly out” before they wear out, meaning that consumers will change their carpet due to style or taste, rather than because the carpet is actually worn out.

The Carpet and Rug Institute (CRI) formed a committee to investigate source reduction and sustainability efforts by individual Carpet Mills. CARE will coordinate with CRI to review findings as available. Experience has shown that such efforts often require a decade or more to move from concept to commercial practice.

Source reduction related efforts undertaken by carpet mills outside this Plan may include using more recycled content (generally), using more recycled carpet content (in particular), increasing recyclability of carpet through materials, design and construction choices, adopting new backing systems, reducing the weight of carpet and carpet tiles without decreasing durability, creating and replicating best practices through research, development and technical assistance, and advancing of closed-loop systems for carpet.

Closed-Loop Recycle

Commercial carpet tiles, which represent ~65% of commercial sales, are 100% recyclable and are being recovered and recycled today. It should be noted the majority of carpet tiles are recycled back into the backing of new tile, as opposed to face fiber. Carpet tile sales are also finding limited but growing interest in the residential sector.

Closed-loop recycle (carpet-to-carpet) is particularly difficult due to the nature of the fiber-spinning operation (requiring extremely pure polymer). This process was practiced on a large scale by Evergreen Augusta via depolymerization (also called depoly). The plant was shut down in 2015 due to mechanical, safety, and economic reasons and will not be restarted. The closure of Evergreen Augusta resulted in a significant reduction in domestic recycling capacity and in the lower recycled output rate in 2015. Depolymerization of nylon 6 (N6) is practiced on a smaller scale by two companies in North America that continue to struggle with both economics and quality issues.

One major carpet manufacturer has just introduced Ari.O carpet. This product is composed of 100% PET so there is no polypropylene backing, no latex adhesive, and no calcium carbonate. The product is completely recyclable and is designed for sustainability. The same basic technology is applicable to nylon

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face fiber carpet through a thermal separation mechanism. A nylon carpet system is expected to be introduced in the next 1-2 years. Other industry efforts are underway to design for recycle, but due to competitive reasons cannot be disclosed in this Plan.

Since the introduction of such newly designed products will take time to penetrate the market, CARE will monitor the sales of those products and, beginning in Year 4 of this plan, CARE will determine the timing, based on estimated lifespan of new products, to begin the education process with retailers and installers for recycling the new products.

Incorporation of recycled carpet content back into face fiber remains challenging. Processing of PCC polymer into a form pure enough to be spun back into fibers continues to be both economically and technically demanding. CARE has been scanning the global technology sphere in search of any technical approach that is applicable to carpet. CARE's list of identified technologies now contains more than 60 options, only a few of which are deemed to be both technically and economically viable and perhaps only one or two are closed-loop technologies. Most options are still in the testing and qualification stage and, if successful, may be two to five years away from entering the market. CARE will continue to support and follow these developments, including encouraging bringing these technologies to California through efforts including grants, consultation, networking with key candidates within the state, and facilitating meetings with GoBiz and RMDZ.

Reuse

Since 2015, the Program has offered an incentive to support the reuse of carpet tile and broadloom carpet. Carpet tiles are considered to offer the best opportunities for reuse, as they are designed for sustainability, although incentive payments are also available for broadloom carpet. CARE has placed a high subsidy on the reuse category, consistent with the waste hierarchy, and will work to expand the reuse category through education and outreach efforts to retailers, installers, and building owners.

Carpet reuse represents a preferred management approach in line with the waste hierarchy. Reuse is also counted toward recycled output and diversion, although broadloom and tile reuse pounds are tracked as separate line items from recycled output. The Program will continue work with recyclers to reach out to charitable organizations or other reuse resources, such as Habitat for Humanity, to promote carpet reuse.

The Program provides incentives to support reuse, as described starting on page 25 in *Chapter E. Collection System*. Market development activities and education and outreach efforts may also support reuse. These efforts are designed to increase reuse quantities by 100% by 2021 compared to 2016.

Recycling

To maximize impact in achieving the goals of AB 2398, the funds generated from the assessments on carpet sales will continue to be primarily directed toward increasing carpet recycling. The Plan is designed to promote the recycling of post-consumer carpet back into new products as the top priority. Secondary product subsidies are currently focused on the use of non-nylon (PET/PTT and PP) materials

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used in manufacture of secondary products, but may be adjusted over the course of this Plan based on the needs of the Program. Recycling and related subsidies are described further in *Chapter F. Market Development*. These efforts are designed to increase the recycling rate to 16% by 2016, 24% by 2020 and 26% by 2021

As noted in *Closed-Loop Recycle* section above, closed-loop recycle (carpet-to-carpet) is particularly difficult due to the nature of the fiber-spinning operation requiring extremely pure polymer, and the economics to date have proven challenging.

While PET and calcium carbonate from PCC continue to be lower value, more difficult materials to move, CARE is supporting these markets and expects demand for both of these materials as inputs for new products to increase in the near future.

- Twelve years ago, work began on the use of PCC in plastic lumbers. CARE has supported those efforts and in late 2016, Fiberon announced the start-up of a new facility in Mankato, Minnesota. Estimated demand for PET fiber will be approximately 24 million pounds in 2017, which equates to over 50 million pounds of new PET PCC consumption. Volume will escalate in the future as capacity expands and a second plant comes on line.
- In addition, American Fiber Cushion, with a California Program 1A grant from CARE, started up their new hybrid fiber cushion plant. This hybrid pad is 100% recyclable by design. In 2017, that plant will also be consuming PET PCC from California.
- Another California Program 1A grant helped support CLEAR in establishing its new processing facility in Lincoln, California, which is growing as a collector, processor, and Tier 2 manufacturer with expansion plans set for 2017.
- As a recipient of the calcium carbonate subsidy added in 2015, L.A. Fiber Company in Los Angeles continues to expand its manufacturing of products containing calcium carbonate, which are being purchased within California.
- Sierra Mat in Modesto launched the first DoubleGreen™ products, produced by combining recycled rubber with calcium carbonate, both from California, in the form of floor mats and wheel stops. This was accomplished with the help of a CARE equipment grant.

CARE has worked closely with all these companies in an effort to grow capacity, jobs, and products supported by grants, incentives and facilitation for market and product development. The Plan continues and builds on these successful efforts that are now proven to be working in the current market environment.

These new capacity increments, while somewhat delayed from original dates, are now coming on line and are part of this Plan's strategy to increase capacity and products. As with any new business, new carpet recycling ventures require extensive time to allow for investment analysis, fabrication, shipment, installation, start-up, and process refinement. Additional new technologies are also under development and expected to continue the capacity and product growth over the next several years. (See the *Closed-Loop Recycle* section on page 21 for further information on new technologies.)

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CAAF or Cement Kiln Fuel/Feedstock

For wastes that cannot feasibly be recycled or reused, environmentally safe management through Carpet As Alternative Fuel (CAAF) or cement kiln fuel/feedstock is an option under this Plan. In recognition of CAAF and kiln's place in the waste management hierarchy (above waste-to-energy, landfilling, and incineration, but below source-reduction, reuse, and recycling), the Program limits the funds used to subsidize CAAF and kiln to 15% of total subsidy payouts. In 2015, less than 7% of funds were utilized toward this purpose. The Plan anticipates that use of CAAF and kiln may increase over the short-term as reuse, recycling, and secondary markets are established, and then decrease over the long-term in the later years of this Plan, as markets are strengthened. In periods when recycling markets decline, such as occurred in global commodities markets in 2015, the Program may temporarily increase its use of CAAF and kiln, although it will maintain the cap at 15% of total subsidy expenditures.

Waste-to-Energy

Waste-to-Energy (WTE) is considered preferable to landfilling and incineration and counts as diversion from California landfills under the Plan, although it is not supported by subsidies or other financial incentives.

Landfill, Incineration, or Other Disposal

Landfilling, incineration, and other forms of disposal are considered the lowest level on California's solid waste management hierarchy, and the Plan does not support their use for disposal of post-consumer carpet. Incineration of post-consumer carpet is prohibited under this Plan for California-based businesses. Some businesses located outside of California may use incineration, although it is discouraged. Any out-of-state incineration will be tracked through regular reporting processes, although no subsidies are provided for pounds managed through incineration. Historically, the Program has not had any incineration reported. No subsidies or other financial incentives are provided for landfilling, incineration or other forms of disposal.

Pounds of carpet material reported as exported are considered diverted from California landfills. The Program encourages materials to be managed in California or domestically, as only such material is eligible to receive subsidies under this Plan.

E. Collection System

This chapter describes the system used to collect and properly manage post-consumer carpet, including collection, reuse, and recycling. The Plan includes strategies and tactics to increase collection of post-consumer carpet and improve throughput of recycled output, including incentives, subsidies, grants, and education and outreach. *Chapter F. Market Development* describes subsidies and other assistance that supports the system of collection, processing, and manufacturing into secondary products. *Chapter H. Education and Outreach (E&O)* describes the E&O activities that support the collection and recycling system for post-consumer carpet in California.

Collection systems are supported through two primary efforts:

- Subsidized service for drop-off sites in each California county.
- Support for collector/sorters, processors, and manufacturers of materials made from post-consumer carpet.

This chapter first provides an overview of the system for collecting and managing post-consumer carpet in California. Next it describes the system of drop-off/collection sites. Then it describes how the Plan supports recycling and reuse activities across the sectors of the collection and processing system.

System Overview

The carpet recycling process starts with developing awareness of the recycling program, and identifying and establishing sites throughout the state, in both urban and rural areas, for drop-off and collection of post-consumer carpet (PCC). CARE works both in California and beyond to engage in significant outreach to all program participants, while working to develop markets for new and existing PCC-content products. Relevant parties in carpet collecting, processing, and manufacturing of recycled content products include the following:

- **Carpet Manufacturers (Mills)** – Carpet Mills are participants under the Plan. Carpet Mills produce broadloom carpet and modular carpet tile subject to requirements under AB 2398. Choices made by Carpet Mills, subject to available technology and market conditions, during the design and production process can help increase source reduction, improve recyclability, and increase demand for recycled carpet content. Carpet Mills are responsible for charging the assessment on all invoices, remitting the assessment funds to the Program on a quarterly basis, and following other requirements of AB 2398 and this Plan.
- **Retailers** – Carpet retailers selling broadloom and/or modular carpet tile in California serve as the point of purchase for California consumers. Retailers interact directly with both consumers and installers. Retailers are responsible for charging the assessment at the point of sale and for following other requirements of AB 2398 and this Plan.
- **Installer/Contractors/Building Owners** – Installer/contractors are hired by retailers or consumers to install purchased carpet, carpet tile, or other flooring materials; as part of this process, they often provide “tear-out” services to remove and dispose of discarded PCC. Installer/contractors are encouraged to locate carpet recycling drop-off sites in their area and to

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prepare tear-out PCC properly for recycling. Building owner education includes mechanisms to engage commercial building owners, especially to promote commercial tile recycling and reuse.

- **Carpet Recycling Drop-Off Sites** – Drop-off sites are locations in which the public—including installers, contractors, and do-it-yourselfers (DIYers)—can take source-separated PCC to be collected for recycling. Generally, these drop-off sites are located at disposal locations such as transfer stations, material recovery facilities (MRFs), or landfills. Drop-off sites may be Program-supported or privately provided. Many drop-off locations accept source-separated PCC for recycling at a reduced tipping fee. Under the Plan, CARE will establish at least one Program supported drop-off site in every county in California by mid-2017.
- **Collector/Sorters** – Collector/sorters receive PCC from drop-off sites and retailer collection sites, sort the collected PCC by fiber type, bail like materials, and sell the carpet they collect to processors that recycle the carpet materials into feedstock for new recycled content products. Collector/sorters serve an important role on the front lines of the consumer/installer interface and interact directly with retailers and drop-off site locations. Targeted subsidies and other incentives are available to collector/sorters, subject to the requirements of AB 2398 and this Plan.
- **Reuse Centers** – Reuse centers or organizations provide opportunities to give a second life to gently used carpet broadloom or carpet tile. Drop-off sites, collector/sorters, or processors may separate gently used California PCC for resale or donation to reuse centers, nonprofits, schools, or other organizations. Collector/sorters and processors are currently eligible to receive subsidies for reuse, subject to the requirements of AB 2398 and this Plan. CARE tracks reuse pounds separately.
- **Processors** – Processors may be located within or outside of California, but they must use California-generated PCC to participate in the Plan. Processors produce various “recycled output” materials, such as carpet fibers and calcium carbonate from the backing, for use as feedstock for new products. Processors sell these recycled materials to manufacturers for use in making new recycled content products. Processors managing California PCC are eligible to receive a variety of subsidies and other support, subject to the requirements of AB 2398 and this Plan. (The previous Plan referred to processors as Tier 1 processors.)
- **Manufacturers** – Manufacturers that use various recycled output materials secured from California processors, such as carpet fibers and calcium carbonate, as feedstock in the production of recycled content products. Manufacturers sell these recycled content products as consumer products or as pellets to be used by other manufacturers in the final production of consumer products. Manufacturers may be located within or outside of California, but like processors, they must use California-generated PCC to participate in the Plan. Manufacturers using California non-nylon recycled output are eligible for subsidies and other support, subject to the requirements of AB 2398 and this Plan. (The previous Plan referred to manufacturers as Tier 2 manufacturers.)
- **California Facilities** – Refers to collector/sorters, processors, manufacturers, and other participants with facilities located in California. As of 2015, the Program has adopted preferential grant criteria for California facilities to encourage increased in-state capacity and throughput development. The Program may consider additional preference mechanisms for California-based businesses, such as the creation of a California facility subsidy payout, which may be adopted over the course of the Plan. Currently, all domestic facilities located within or

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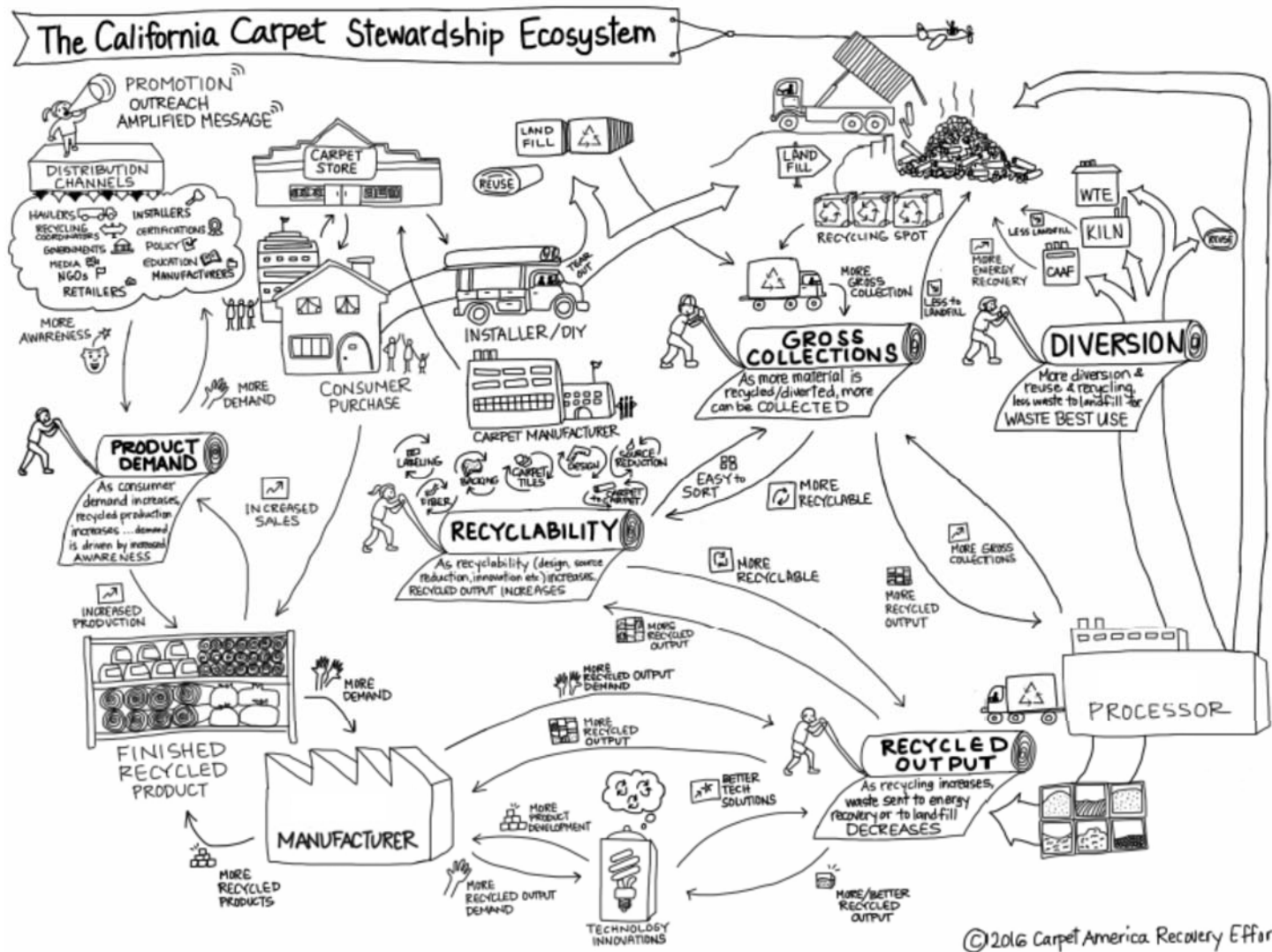
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outside of California are eligible to receive subsidies, subject to other Program requirements. No subsidies are available for facilities located outside of the United States. CARE anticipates that as in-state capacity expands in California; a greater percentage of assessment funds will be distributed in the state over time.

- **Stakeholders** – The Program is supported by an array of additional stakeholders represented within the categories above and by other organizations such as local governments, state agencies, nongovernmental organizations, nonprofits, waste agencies, waste haulers, purchasing cooperatives, associations, and other groups. In 2016, CARE formed the California Council on Carpet Recycling (Council) to serve as an advisory committee representing these many stakeholder groups.
- **Consumers** – Consumers include individuals, businesses, and agencies involved in making decisions about the purchase of broadloom carpet or carpet tile as well as the tear-out and removal of discarded post-consumer carpet. Over the course of this Plan, the Program will increase messaging to encourage consumers to “Buy Recycled and Recyclable” carpet products, look for opportunities for carpet reuse and donation, and request or require that installer/contractors bring discarded carpet to a drop-off site to be recycled. Since the purchase of carpet is an event occurring infrequently, emphasis will focus on active buyers and point-of-purchase interactions as opposed to the public at large.

Figure 1 presents a map showing these various entities and their relationships in supporting carpet stewardship in California.

Figure 1. California Carpet Stewardship “Ecosystem” Map



Collection Locations

Drop-off Collection Sites

Carpet is collected at two types of sites: public drop-off stations throughout the state and private retail stores or other sites. Public drop-off sites are sponsored by the Program and coordinated through local government representatives in each targeted region. Private collection sites rely on direct service by collector/sorters or processors and are generally located at carpet retailers or local disposal sites. Private collection sites are generally only available to individual retailers or their installation contractors for disposal following carpet tear-out. The descriptions below provide more information on these two methods used to collect post-consumer carpet:

- **Public drop-off sites.** Public sites include traditional disposal locations, such as transfer stations, landfills, material recovery facilities (MRFs) or construction & demolition (C&D) facilities. These locations allow installation contractors, DIYer individuals and businesses to drop-off source separated and properly prepared PCC discards for recycling. As with private sites, participating collector/sorters and processors provide and regularly service PCC collection containers (such as trailers, debris boxes, or cargo bins). A tipping fee is collected by each drop-off location. Some facilities offer reduced tipping fees for source-separated carpet to provide incentives for clean, sorted material and reduce landfilling. The Program provides collection containers and transportation service for the public drop-off sites.
- **Private collection sites.** These are typically private commercial businesses, generally carpet retailers or commercial distributors, providing installation and PCC tear-out services for their customers as part of the purchase of new carpet/flooring. Installation contractors providing these services may return tear-out PCC to the retailer for disposal or recycling. During 2015, an estimated 200 retailer locations were being serviced statewide. For competitive reasons, collector/sorters do not currently release listings of their private collection locations. Participating collector/sorters and processors may provide PCC collection containers (trailers, debris boxes, or cargo bins) to collect source-separated PCC discards for recycling on a pay-for-service basis. Private sites arrange for collection services directly from collector/sorters or processors as a pay-for-service.

As part of CARE's 2017 convenience study, described in *Convenient Collection* starting on page 33, CARE will update the list of private collection sites around the state. While detailed private location data will not be released if confidential, CARE will work to incorporate such sites on a general map of California by county (see Figure 2).

Figure 2 shows collection sites for the Program. Since 2013, the Program has approximately doubled the number of sites each year, from 6 counties in 2013 to 11 counties (14 sites) in 2014 and 22 counties (23 sites) in 2015, including urban sites in Sacramento and El Dorado. The Program is on track to double the number of counties with supported drop-off sites by the end of 2016. Currently, there are 30 active CARE sites. Under the Plan, the Program will continue to provide service in both urban and rural counties. The Program will coordinate with local governments, local disposal locations, the California

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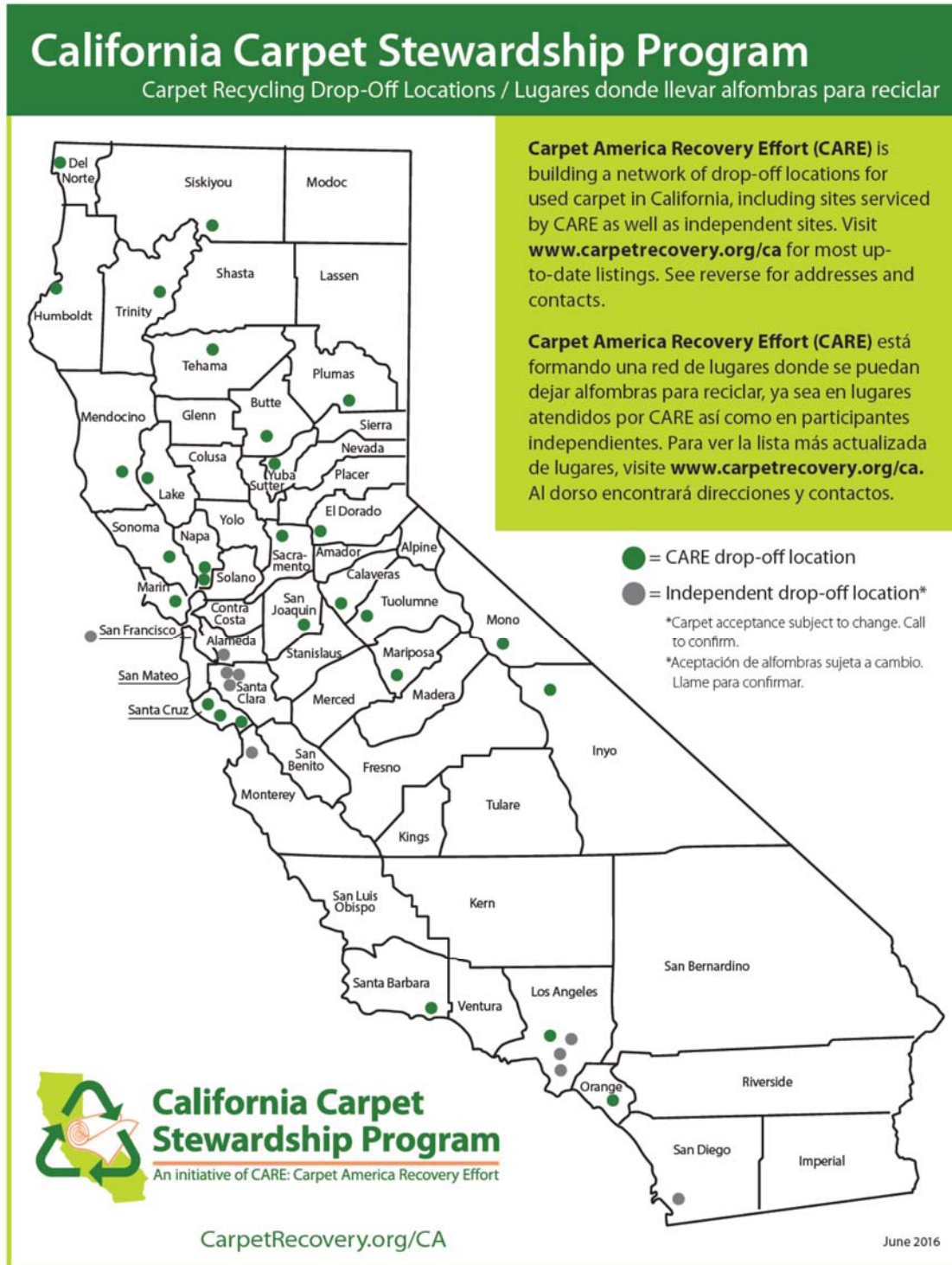
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Council on Carpet Recycling (Council), and CalRecycle to identify potential drop-off locations. Please refer to page 33 for more details on the process of siting locations.

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Figure 2. Drop-off Collection Sites for California Carpet Stewardship Program



The current version of this map is available on the Program website at the following link:

https://carpetrecovery.org/wp-content/uploads/2015/06/CARE_CollectionMap_061316_bilingual.pdf

The Program sponsors drop-off sites in this way:

- Program staff provides technical assistance and recommendations for local governments and disposal locations that best meet local needs.
- A trailer or cargo shipping container is placed at the facility (size and style selected jointly with the facility).
- CARE provides necessary location-specific signage and informational materials and works to train staff.
- CARE manages the scheduling of trailer/container exchanges and transportation to designated collector/sorters or processors.
- Participating counties oversee daily operations and promote the Program to contractors, installers, retailers, and DIYers. Counties may adjust tipping fees to encourage participation. All entities dropping off carpet, whether a person or business, must prepare the carpet by cutting the carpet into manageable segments (generally 4 to 6 feet); packaging the carpet into rolls; removing tack-strips, trash, and debris; and separately rolling or stacking carpet pad (where accepted).

The Program currently covers the costs of container storage (collection containers or trailers), shipping/transportation to the collector/sorters and processors, and tipping fees charged by the receiving party. It also provides basic educational materials such as brochures and signage tailored to the needs of each county to support local education and outreach. Following collection, post-consumer carpet is delivered to collector/sorters or processors for sorting and/or processing.

In 2015, the Program undertook an effort to increase service systems and improve operational efficiency. The team added basic dispatching service support and administrative assistance as well as established a seven-step collection site workflow to increase efficiency and response time following an agreement for participation.

Rural Collection

The Rural County Collection Program began in 2012 as a pilot effort with six rural counties. Considered a success, the rural collection pilot became a regular element of the Program in 2014 and has now been incorporated into the statewide Drop-Off Collection Site program described above. The Plan includes a shift from rural county drop-off site support to a new statewide collection goal adopted in 2015 of establishing at least one public drop-off site in all 58 California counties by end-2017. The Program will continue to work closely with Rural Counties Representatives of California (RCRC) to identify, select, and coordinate with rural counties to expand drop-off opportunities in rural areas. However, since urban counties are now also under development, we no longer refer to rural collection, but rather the Drop-Off Collection Program.

Convenient Collection

CARE is working to make convenient collection available throughout California. After a successful rural pilot program, the pilot was expanded to include both urban and rural locations. In response to challenges faced at various new drop-off locations, especially larger, more complex locations, this Plan allows for the tailoring of contracts and flexibility to work at the pace of the local organization. In addition, sites have varying restrictions on space, labor, and dock or ramp access, which has resulted in changes to the Program's drop-off site logistical support to accommodate diverse needs and to ensure success. CARE is also working to ensure the expansion complements, rather than competes with, or worse destroys, the private collection networks set up by collector/sorters and processors; accordingly, the Program avoids setting up new drop-off sites near private enterprises. In addition to the continued expansion in 2017, with the goal of providing coverage in all 58 counties by the end of 2017, CARE will conduct a convenience study referenced below to ensure the goal of convenient collection for all California residents is achieved.

CARE offers support for drop-off sites by providing a container for collection, third-party hauling to bring carpet material to recyclers, and promotional materials. In addition, CARE provides individualized and ongoing technical assistance to each drop-off site.

Steps for siting, establishing, and on-boarding new drop-off sites are outlined below:

1. **Identify a Facility:** Drop-off sites are generally established at a transfer station, landfill, material recovery facility (MRF), or C&D recovery facility. Ideally, the facility should be centrally located and selected to maximize convenience and participation from residents, contractors, and carpet retailers. CARE coordinates directly with facility staff and/or local government recycling coordinators to arrange first contact and discuss the Program.
2. **Arrange a Site Visit:** Once a location has been selected (e.g., a transfer station), a CARE Associate arranges a site visit with key facility staff to go over the Program in more detail, and work through the operational logistics of how to collect and consolidate the received material. In many cases, the local government contact will join the site visit to provide valuable input and regional context to the discussion.
3. **Conduct On-Boarding Conference Call and Order Container:** Once an agreement is reached to establish a new drop-off site, a conference call is scheduled with facility staff (e.g., administrative and operational personnel) to review program procedures and promotional materials. A container is ordered through one of CARE's third-party haulers and delivered to the site once it is ready to begin accepting material.
4. **Begin Drop-off Site Operations:** Once the container is delivered, the drop-off site begins accepting and collecting carpet while fine-tuning administrative and operational logistics. Approximately one week before the container is full, drop-off site staff are instructed to submit a service request through the CARE website. CARE arranges the pick-up of the full container, which is swapped-out for an empty one.

5. **Promote the Drop-off Site:** Once the logistics are in place, CARE provides both physical and electronic promotional materials to the drop-off site, including:
 - a. Bilingual flyer to instruct contractors and installers on how to prepare carpet for recycling.
 - b. Weather-resistant “Carpet & Pad Recycling Here” sign (2’ x 3’).
 - c. CARE poster.
 - d. Media kit (press release, newsletter, and public-service announcement templates).
 - e. “How to Load the Trailer for Carpet Recycling” flyer.

CARE strongly encourages the facility to list carpet as a recyclable material on its website and to offer a reduced tip fee to incentivize recycling and proper handling by contractors and carpet installers.

6. **Quarterly Report and Quarterly Call:** Drop-off sites are required to submit a brief report on a quarterly basis, which includes amounts of carpet collected and other information. Participation in a quarterly phone call is also required so that CARE can ensure the site is engaged, address any issues, share experience and learnings, and demonstrate CARE’s continued interest, involvement, and oversight of the Program.

The drop-off sites, including rural collection, are designed to ensure that consumers have access to reasonably convenient opportunities in each county to manage their post-consumer carpet. After the Program achieves its goal of establishing at least one public drop-off site in each county by the end of 2017, the Plan incorporates the option of conducting a study of collection convenience to determine if and where additional sites may be needed. In the event that any particular county or counties decline drop-off service offerings, CARE will work to reallocate resources to other areas by considering such potential factors as population density, retailer density, discards flow, facility readiness, and/or other factors as identified through the convenience study, if results are completed and available. Although most carpet is installed by professional installers, the convenience study will also work to quantify the do-it-yourselfers to ensure this segment of the population is considered in determining convenience for tear-out carpet management options. One goal of this study will be to identify locations without convenient access and include recommendations for prioritizing where to place new locations. Upon completion of the study, CARE will consider these findings and identify a timeline for implementation, should the study indicate that sufficient sites are not already provided.

Recycling and Reuse Processes

Processors receive whole carpet either directly from generators or from collector/sorters. The carpet may be pre-sorted by fiber type or sorted when received. Most carpets are not easily visually identifiable. Sorting is done by hand using a specialized infrared device, which identifies the face fiber material type. Fiber types include nylon 6, nylon 66, polyethylene terephthalate (PET), polytrimethylene terephthalate (PTT), polypropylene (PP), mixed fibers, and natural fibers (such as wool). The Program as outlined in the Plan is designed to ensure that all relevant carpet polymers and fibers are covered.

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Whole carpet is processed to produce the recycled output for use in secondary products, including carpet made from recycled content. Processing methods include a wide range of technical/engineering approaches to separate the more valuable face fiber from the backing material, and/or chemical depolymerization to produce a high-quality polymer able to be re-extruded into new carpet fiber. The backing material (including calcium carbonate, latex, glues, and debris) and less desirable, unrecyclable face fiber may be diverted or placed in a landfill.

Diversion is counted when the carpet materials are reused as-is, processed into a recycled output feedstock for new products, processed for use in Carpet As Alternative Fuel (CAAF) or feedstock for kilns, used as a waste-to-energy (WTE) source, or exported.

Collection and processing wastes that cannot be reused, recycled, used for energy recovery (CAAF, Kiln or WTE), or otherwise diverted are sent to landfill. The Program tracks the amount that is sent to the landfill as a separate item. Currently, about 20% of gross collected material becomes landfilled, reflecting a diversion rate of nearly 80%. The Program is working to increase carpet reuse and recycling, divert materials that cannot feasibly be recycled, and reduce the amount of carpet discards sent to California landfills. In cases where the whole carpet is shipped outside of the United States for processing, the Program is only able to report quantities of carpet exported and is unable to track the precise final disposition of the exported materials. However, exports currently represent a small portion of total diversion (<10%).

Collector/Sorters

Collector/sorters collect used carpet and sort it by fiber type in preparation to sell to processors, who process (recycle) the material into usable recycled output. Collector/sorters collect used carpet in three ways: 1) they may place a trailer or container at a drop-off site that can then be filled with carpet; 2) they accept carpet drop-offs at their warehouses for a fee; or 3) they collect from a private site, such as retailer.

Collector/sorters are eligible for two types of subsidies: the collector/sorter subsidy and the reuse subsidy, as described in the *Subsidies* section of *Chapter F. Market Development*.

The Program collects detailed data regarding materials handled by these entities. Six collector/sorters currently participate in the Program. Two participating collector/sorters also function as processors. This list includes the facility names and addresses for all public sites. Facilities are limited to members of the Program, locations that are participating in subsidies, and those that have agreed to be listed as collection sites. In addition, approximately 200 privately contracted collection sites are present throughout California. For competitive reasons, collector/sorters do not currently release listings of their private collection locations. Note that participating facilities and accepted materials change over time. Data maintained on the Program database is based on the best available data as reported by the participating facility, and participants are encouraged to update their data annually.

To be considered a qualifying recipient for potential funding, collector/sorters are required to be CARE members in good standing and sign an agreement. Under the agreement, collector/sorters are subject

to reporting, Agreed Upon Procedures (AUPs) review, management practices, and documentation requirements.

The Program regularly updates an online map of drop-off sites (shown in Figure 2), which provides the public an easy, interactive way to find drop-off sites for their used carpet. The map uses data from a survey of current sites and lists information such as the collector/sorter's address, hours, and tipping fees. The Program promotes the map through digital, print, and in-person communications. Information maintained in the Program database is based on the best available data as reported by the participating facility, and members are encouraged to update their data annually.

Reuse

The Plan currently supports reuse through reuse subsidies available to collector/sorters and processors, as described in the *Subsidies* section in *Chapter F. Market Development*. Education and outreach activities also promote reuse.

Processors

Processors are the organizations that receive source-separated PCC discards and provide the initial conversion of PCC discards into recycled output to be used in the manufacture of secondary products. Some processors may also function as collector/sorters or manufacturers. Subsidies to support processing of post-consumer carpet are described in the *Subsidies* section of *Chapter F. Market Development*.

Throughput is defined as the total amount of material received at a facility for a specific activity (measured in tons per year, TPY). Over time, the Program seeks to increase yield to maximize recycled output (RO) for secondary use and to minimize the amount of processing waste material sent to disposal. Increasing the yield of carpet recycled output during the recycling process can have a significant impact on the total recycling and diversion rates, even without increasing gross collections.

Manufacturers

Used carpets may be recycled to make new carpet or as a component to produce other products. Secondary manufacturers obtain recycled output processed from the carpet fiber or carpet backing and incorporate it into new or existing products. These manufacturers produce a variety of recycled-content products including carpet cushion/underlayment, building insulation, water heater blankets, mattresses, pillows, pallets, automotive parts, shelving units, toolboxes, and erosion control products. *Chapter F. Market Development* provides more information on manufacturers, including subsidies available for using recycled carpet content.

F. Market Development

The Program will continue to work with processors, manufacturers, and California public agencies to advance carpet recycling and expand the market in the following ways:

- Supporting the development of recycled carpet products produced in California.
- Encouraging alternative uses for existing products, such as recycled carpet content cushion.
- Increasing number of manufacturers producing recycled carpet products in California.
- Spurring public agency interest in purchasing recycled carpet products through collaborative product presentations with CalRecycle Tire Products staff.
- Building market demand for products made with California post-consumer recycled carpet content.

The Program is working to spur continuous and meaningful improvement through the expansion of recycled carpet products produced and manufacturer capacity in California. Subsidies are designed to increase collection and recycling of post-consumer carpet and to advance development of a wider variety of products made from recycled output. Subsidies, grants, education, collaboration and other support offered by the Program promotes increases in processing of used carpet and production of secondary products in California.

Subsidies are prioritized under this Plan as the primary incentive to drive recycled output and make progress toward other goals. Other incentives and support listed below are included with an estimated minimum annual budget allocation. However, precise amounts may be adjusted up or down based on available funds. For example, in the event that recycled output increases are less than anticipated in a given year, surplus funds may be reallocated to other strategy areas such as grants, technical assistance, education and outreach, or other program areas. Recommendations will be presented to the SPC for consideration. The Council will be consulted for input on allocations and focus areas, although the SPC/SFOC will make final decisions.

The Program conducts the following efforts, as described in this chapter, to increase carpet reuse and recycling of carpet into secondary products:

- Subsidies for collector/sorters, processors, and manufacturers.
- Targeted grants for selected capital projects; research, development, and testing; recycled product procurement; design; and reuse and collection.
- Other financial incentives as market conditions indicate.
- Technical assistance.
- Promote education and collaboration of and among stakeholders regarding opportunities within the marketplace.

Subsidies

To support the performance goals as described in *Chapter C*, the Plan provides for a potential range of incentives and subsidies within the Program for the following entities and activities, as described further below:

- **Collector/sorters:** for reporting and for carpet sent for reuse or recycling.
- **Reuse:** for carpet tiles and broadloom carpet.
- **Processors:** for recycling carpet tile, Type 1 recycled output, and Type 2 (calcium carbonate).
- **Manufacturers:** for use of non-nylon recycled carpet materials as feedstock in the manufacture of new products.
- **Energy Recovery:** subsidies targeting limited use of CAAF/Kiln for diversion of material which cannot be sold as recycled output, subject to limitations outlined elsewhere within this Plan. WTE is not eligible to receive subsidies.

As encouraged by CalRecycle and as prior experience has instructed, the Plan incorporates flexibility and elasticity to allow for quick and efficient reaction to market conditions to promote and take advantage of opportunities and react to challenges. The Program reserves the right to add, delete, increase, decrease, or otherwise modify incentives, subsidies or eligible recipients over the course of the Plan, as deemed necessary to achieve the stated performance goals and in response to market dynamics. CARE will review Program financials quarterly to preempt any budget shortfalls. CARE will monitor monthly reporting from collector/sorters, processors and Tier 2 manufacturers to examine trends and projections. Such analysis will be overlaid with quarterly sales results, which underpin revenue inflow, and informed by macroeconomic factors such as oil prices, virgin polymer prices, financial cash flow analysis and economic model projections. Information will be reviewed quarterly with the SPC. If changes are needed, CARE will review recommended actions with the Council and CalRecycle prior to implementing any changes to program incentives.

Approach to Subsidies

The Plan's approach to subsidies to be offered under the Program incorporates the following principles, described in the sections below:

- Performance-based payouts
- Subsidy stacking
- Subsidy guarantee
- Subsidy caps
- Reserve funds
- Proportional payouts
- Financial assurances

Performance-based Payouts

The Program is performance-based, so payouts are issued based on pounds of materials sold and shipped (or donated in the case of reuse). Material placed in inventory is not subsidized, but it is tracked. Participants must maintain records to substantiate all material-handling and sales claims, submit to AUP reviews, and meet other program requirements as described in participant agreements. This concept is discussed further under financial assurances later in this section.

As part of this Plan, CARE intends to undertake a study to evaluate tying subsidy levels to output pounds, also known as “a tiered subsidy payout.” For example, on an annual basis for each participant, Tier 2 subsidies might be paid at 20 cents/lb. on 0-10 million pounds of output, 18 cents/lb. on 10.1-25 million pounds of output, 15 cents/lb. on 25.1-50 million pounds of output, etc. Note, the payouts listed here are for example only and do not reflect actual proposed changes. The study will be completed and reviewed with the Council and CalRecycle prior to October 1, 2017.

Subsidy Stacking

Participants may be eligible for one or more incentives and/or subsidies on a single pound of material, based on the particular activity or activities being performed. For examples as to how multiple subsidies may be applied to particular pound of carpet collected, see *Attachment 6. Description of Subsidy Flow and Stacking*.

Subsidy Guarantee

All subsidies offered are subject to a 12-month guarantee. In other words, the subsidies will not be reduced or eliminated without providing subsidy recipients with a notice released a minimum of 12 months before a reduction goes into effect. This element of the Plan is designed to reduce risk for investment and provide the ability to plan ahead in terms of cash flow. The guarantee timeline is subject to a safety-valve provision deemed necessary to ensure liquidity of available funds. A proration formula for subsidy payouts to ensure fund solvency will be developed on or before October 1, 2017, the next opportunity to modify the subsidies under the Plan. Given the significant level of subsidies currently being offered by the Program, it is believed that these changes will not greatly affect stakeholders’ willingness to invest in opportunities presented by the Program. The proration formula will be reviewed with CalRecycle and the Council prior to implementation. [See *Proportional Payouts – Safety Valve* on page 40 for further details.

In September 2016, CARE issued a notice to participants that CARE is conducting a review of all subsidy offerings for collector/sorters, processors, and manufacturers. This is a reflection of the significant number of potentially valuable Program elements gained from the input of the Council, a recognition of a need for greater future flexibility to quickly react to market conditions as strongly encouraged by CalRecycle, the need to adjust individual program elements to take advantage of learnings of Program experiences, and the current expectation that incentives put into effect in 2016 will have the desired results of significantly increasing recycled output in 2017, 2018 and beyond. Effective October 2017 (12 months from the close of the third quarter of 2016), CARE may enact adjustments to subsidy program offerings resulting in adjustments to qualifications, realignment, reductions, eliminations, or other

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changes to specific subsidy per pound payout amounts. CARE retains the ability to adjust individual subsidies upward at any time, subject to other requirements or limitations within the Program and consistent with fund cash flow.

It should be noted, due to the guarantee under which CARE operates, it was critical that the notice of potential subsidy changes be made before the end of Quarter 3 of 2016 based on financial analyses run on anticipated growth in recycled output pounds. The timing was important to ensuring fund stability and as a result there was not sufficient time to review this decision with the Council prior to taking action. Under this new Plan, and given the new monthly and quarterly analysis being implemented, CARE expects to have adequate insights into financial impacts to be able to operate with sufficient time to have a dialog with the Council before changes are necessary. However, should a major shift occur, CARE reserves the right to act swiftly to deal with any situation to protect recyclers and the fund balance.

Incentives listed below (reporting incentives, processor growth incentive, manufacturer non-nylon growth incentive, or other incentives as developed over the course of this Plan) are not subject to this timeline guarantee. CARE retains the ability to reactivate incentives and/or adjust the bonus thresholds moving forward, on a quarterly basis. Such program changes will be discussed with the Council and CalRecycle prior to implementation and subject to timely responsiveness to market needs

Subsidy Caps

Under this Plan, subsidy payouts for collector/sorter whole carpet sorted and shipped is subject to a maximum cap per quarter and per year payable to any single participant, currently set at \$150,000/quarter and \$400,000/year. CARE will consider the adoption of similar caps for other subsidies over the course of this Plan as may be beneficial to the operation of the Program. CARE may enact such caps at any time under this Plan, subject to the stated subsidy guarantee noticing referenced above. A volume-driven subsidy, in which a company receives lower subsidies as they produce higher quantities, is also a consideration open to CARE in the administration of the subsidy program. [See section on Performance-based Payouts, page 39.]

Reserve Funds

This Plan provides for a reserve equal to a one-quarter average over the last four quarters based on total expenses (incentives, program expenses and administrative expenses, including the CalRecycle fee). The reserve functions as part of the Program's financial assurance mechanisms. This is a clarification to previous reserve descriptions of a one-quarter average of subsidy payouts. This increased reserve will assist CARE in managing program funds over the course of the Plan term.

Proportional Payouts – Safety Valve

The safety valve concept has been developed to handle an unexpected event that would jeopardize the solvency of the fund, such as a rapid increase in recycled output. In order to preserve the fund reserve, all expenses will be paid as scheduled, unless the Program payouts for a particular quarter exceed the one-quarter reserve (i.e., fund balance drops below the reserve level). In this instance, and as long as

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the reserve remains above 50% of the calculated reserve level, all subsidies will be paid out as earned for the current quarter. In the subsequent month, payouts will be reduced proportionally to rebuild the reserve according to the reserve formula. In the event the reserve balance would fall below 50% of the target level, subsidies in the current quarter will be distributed proportionally to all contributing parties based on number of pounds managed. This proportional payout formula would go into effect with the next monthly payout and continue to until the reserve is reestablished or other program adjustments are implemented. For example, if a total of 1 million pounds was managed by Processors 1, 2 and 3, each contributing respectively 500,000 lbs., 300,000 lbs. and 200,000 lbs., subsidies would be paid based on available funds to Processors 1, 2 and 3 at 50%, 30% and 20%, respectively. In the event such measures must be implemented, CARE will notify CalRecycle and the Council as quickly as possible. This safety valve is particularly important due to the quarterly lag time, especially when it takes 90 days after approval to implement any change in assessment.

Financial Assurances

All subsidies are paid based on output: material that leaves the facility as a shipped and sold/donated feedstock or finished product (e.g., sorted/baled whole carpet or carpet tile, fiber, calcium carbonate, finished recycled product, etc.). In this way, CARE is assured that program funds are being paid for performance and precise pounds of managed material, not estimated pounds which may be received. Recipients further maintain records, bills of lading, invoicing and other documents reviewable by the Program and third-party accounting firm as a financial safeguard, mechanism for fraud prevention, and fund assurance.

Since the Program began, CARE has adopted a series of financial assurance mechanisms to ensure proper stewardship of the fund. These assurances were summarized in memos to CalRecycle, dated March 2014 and July 2014. Fraud protections were summarized in the third quarter of 2016 and are on file with CalRecycle. CARE is further subject to third-party and CalRecycle audit on an annual basis. Performance and financial audits are presented within annual reports. CARE responds to CalRecycle audits by request. Over time CARE implemented a series of controls including a participant agreement process in which assurances and safeguards such as reporting procedures, records retention, attestations, protocols, AUPs, and other terms and requirements under this program are outlined in a legal contract with participants. Such documents are available to CalRecycle upon request. Current agreements were effective January 2016, with a two-year implementation term.

Fraud Prevention and Risk Management

The Program has been continuously improving internal controls as well as the AUP and review processes. The below list of program enhancements have been put into practice over the last 18 months in an effort to reduce the likelihood of fraud.

1. Formal legal contracts with all Carpet Mills, collectors/sorters, processors, and manufacturers that lays out all requirements of participation and reporting.
2. Enhanced AUP reviews carried out by Aprio (formerly Habif, Arogeti & Wynne), the Program's accounting firm.

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3. New member start-up package and visit by CARE staff to inspect facilities before joining the Program.
4. Random visits by CARE Team members to view facility and pull samples for testing.
5. Enhanced testing for moisture (weight correction) and ash content (including analysis of data by a Ph.D. statistician).
6. Enhanced reporting sheets to examine material balances.
7. Shift to monthly reporting for improved and timely data visibility and trend analysis.
8. Implemented threshold targets for pounds of PCC and processed good inventory to automatically flag participants that are above targets.
9. Set percentage threshold targets from month to month on both PCC and processed goods inventories to automatically flag participants that are above targets.

Subsidy Categories

To support carpet recycling and reuse, the Program offers subsidies for the following activities, as described further below:

- Collection and sorting
- Reuse
- Processing
- Recycled content manufacturing
- Energy recovery

A complete summary of all current subsidies is presented in *Attachment 3. Summary of Subsidies*.

Collection and Sorting

Collector/Sorters are currently eligible to receive recycle subsidies, as well as reuse subsidies (see *Reuse* section for more detail). Reuse subsidies are payable for pounds of broadloom carpet and carpet tile for reuse only. Collected, sorted, sold, and shipped for recycling tile pounds are currently eligible for the Collector/Sorter subsidy. As collector/sorters are not involved in processing, they are not eligible to receive recycling and manufacturing subsidies. Only collector/sorters are eligible for the reporting incentive.

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Subsidy	Eligible	Payout	Notes
Reporting incentive	Collector/sorters	\$1,000/period	Incentive paid per period; not subject to guarantee timeline
Sorting (whole carpet shipped and sold for recycling)	Collector/sorters ³	2 cents/pound (Payable for broadloom carpet only; 2 cents <u>not</u> payable for reuse pounds; <u>not</u> payable for carpet tile recycling) Cap: Maximum payout of \$150,000/quarter or \$400,000/year to any participant	Paid on pounds of PCC collected, sorted, shipped, and sold or donated for recycling May be reduced Q4 2017

Reuse

Reuse subsidies are designed to develop a market for reusable carpet and carpet tile. Presently both collector/sorters and processors are eligible to receive reuse subsidies. However, neither collector/sorters nor processors are eligible to receive both reuse subsidies and collection subsidies on the same pounds. For instance, if a pound of broadloom or tile carpet is collected, sorted, and sold/donated for *reuse*, it is eligible to receive the 10-cent reuse subsidy, but *not* the 2-cent collection subsidy.

Subsidy	Eligible	Payout	Notes
Tile reuse	Collector/sorters Processors	10 cents/pound (pounds <u>not</u> eligible for 2-cent collection subsidy)	For materials shipped and sold or donated Subject to adjustment, beginning Q4 2017
Broadloom reuse	Collector/sorters Processors	10 cents/pound (pounds <u>not</u> eligible for 2-cent collection subsidy)	For materials shipped and sold or donated Subject to adjustment, beginning Q4 2017

³ Processors who also act as collector/sorters are also eligible for collector/sorter whole carpet shipped and sold for recycling subsidy; subject to per participant cap limitations listed above and future adjustments.

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Processing

Subsidies for recycled output are paid out with a priority toward those materials with an ash content of less than 25%. The Program will from time to time conduct an analysis of field samples to determine compliance and whether or not the current ash content threshold should be adjusted from less than 25% for Type 1 and greater than 25% for Type 2.

From time to time, CARE will conduct moisture level tests to ensure excess weight due to water is not a factor. Under the current policy, equilibrium moisture levels at or below 5% are considered routine, and no correction will be applied. For moisture levels above 5%, the actual moisture level minus the base equilibrium level (5%) will be used to reduce the number of recycled output pounds proportionally before any incentive or subsidy payouts are calculated. Moisture levels are accounted for in the CARE Ash and Moisture Protocol (embedded as an exhibit within the Processor agreement). Participating processors must submit at least one ash test following this protocol for every million pounds processed during each reporting period. CARE retains the ability to adjust this and other protocols as needed over the course of the Plan. CARE may exempt some processing procedures from this requirement; currently depolymerization and carpet tile processing techniques are exempt from this requirement.

Subsidy	Eligible	Payout	Notes
Tile recycling	Processors	10 cents/pound	For carpet tile only Subject to adjustment, beginning Q4 2017
Type 1 recycled output (ash content less than 25%)	Processors	10 cents/pound	Subject to adjustment, beginning Q4 2017
Type 1 growth incentive	Processors	10 cents/pound Paid only on Type 1 pounds processed in excess of specified threshold, which may be adjusted quarterly; threshold set at 11 million pounds since Quarter 3 of 2014	Incentive, not subject to guarantee timeline Deactivation anticipated Q1 2017
Type 2 recycled output (ash content above 25%)	Processors	3 cents/pound	Subject to adjustment, beginning Q4 2017
Calcium carbonate	Processors	17 cents/pound	Subject to adjustment, beginning Q4 2017

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Recycled Content Manufacturing

The Program provides subsidies to manufacturers utilizing Type 1 non-nylon (PET/PP) recycled output in the production of pellets or consumer products. Manufacturer subsidies, currently focused on non-nylon recycled output, seek to advance development of a wider variety of products using carpet recycled output. Similar subsidies for nylon may be considered over the course of the five-year Plan term.

Subsidy	Eligible	Payout	Notes
Manufacturer incentive for non-nylon recycled products	Manufacturers	25 cents/pound	Subject to adjustment, beginning Q4 2017
Manufacturer growth incentive for non-nylon recycled product	Manufacturers	10 cents/pound above threshold Paid only on Type 1 pounds used in the manufacturing of secondary products in excess of specified threshold, which may be adjusted quarterly; threshold raised to 3.5 million pounds effective Q3 2016	Incentive not subject to guarantee timeline; Deactivation anticipated Q1 2017

Energy Recovery

Limited use of CAAF/Kiln is supported under this Plan to facilitate diversion of pounds unable to be converted or sold as recycled output or use in secondary recycled products. CAAF/Kiln is capped as described within this Plan. WTE is not eligible to receive energy recovery subsidies.

Subsidy	Eligible	Payout	Notes
Carpet As Alternative Fuel (CAAF)	Collector/sorters Processors	3 cents/pound	Subject to adjustment, beginning Q4 2017 CAAF/Kiln capped ⁴ at 15% of subsidy payouts
Kiln (as fuel alternative)	Collector/sorters Processors	3 cents/pound	Subject to adjustment, beginning Q4 2017 CAAF/Kiln capped ³ at 15% of subsidy payouts

⁴ The CAAF/Kiln subsidy cap is based on total subsidy expenditures as calculated on an annual basis; the cap is not applied to individual participating subsidy recipients, rather Program-wide.

Grants

The Program includes a multi-faceted grant program designed to increase collection, processing, and manufacturing capacity and throughput of post-consumer recycled carpet in California. Grants are currently expected to average \$1.5 million annually in 2018 through 2021, with a combined \$6 million identified for all grants expenditures throughout this period. No new grant funds are currently anticipated in 2017, beyond those previously allocated in Cycles 1A/1B/1C, since a new Request for Proposals would likely shift new grants into 2018. The Program may choose to allocate a portion of these funds to new grant element areas identified within this Plan, including those recommended by the Council. Additional funds may also be allocated to grants based on available funds, such as in the event that recycled output is less than anticipated leaving unspent subsidy funds available for reallocation to other budget areas.

The Program may adjust available grant funds up or down annually, depending on recycling levels, subsidy payouts, and other Program priorities. Historically, the Program has committed at least 50% of grant funds to California-based projects and expects to increase the preference for California-based activities in the future. The Program will continue to utilize grant program format, processes and protocols as established in Cycle 1A/1B/1C, although the Program may make adjustments to grant funding solicitation requirements, target areas, preference or priority criteria, application documents, or other requirements based on program needs. Draft solicitation will continue to be released in advance, along with opportunities for stakeholder input such as Council review, public webinar, question/comment period, etc. to provide input into this process. Annually, if SPC approves, the Program will develop a proposal for grant funding element focus areas and allocation amounts for approval by the SFOC. The Council will be provided an opportunity to give input on these factors, although the SPC/SFOC will make final decisions.

The Program provides information about grants on its website (<https://carpetrecovery.org/ca-grants/>), including grant solicitations released to date, questions and answers about grants, templates, and other supporting materials.

Grant funding areas may include the following:

- Capital grants
- Research, development, and testing grants
- Recycled product procurement grants
- Micro-grants for reuse and collection
- Design grants

Potential grants are listed below and are subject to available funding.

Capital Grants

The Program launched its first capital grants in 2015. These grants may be offered in future years, subject to available funding and will continue to be modeled after the Cycle 1A grant solicitation issued in 2015, subject to refinement over time.

- For infrastructure, capital equipment, and investment.
- To support collection, processing, recycling, and recycled content manufacturing.
- To increase capacity and throughput.
- Preference for California-based businesses and projects.

Research, Development, and Testing Grants

The Program launched its university research grants in 2014, and it initiated the R&D and Testing grants in 2015. Grants in this category may be offered in future years, subject to available funding and are expected to be modeled after the Cycle 1B grant solicitation issued in 2015, subject to refinement over time. At this time, CARE does not foresee re-issuing specific university grants, although eligible parties under this grant area may include universities.

- R&D grants to processors and manufacturers to improve recycled output quality and yield and to increase the number and diversity of recycled content products.
- Fundamental R&D through innovation grants, research studies, testing grants, innovation awards, and design competitions leading to increased recyclability and recycled content use.
- Assistance to Carpet Mills to improve recyclability.
- Innovation grants for new product research, development, testing, and promotion to address focus areas, which may be modified from year to year.

In an effort to further expand potential California outlets for PCC materials, product development initiatives are being evaluated in three specific areas. Uncommitted or reallocated budget funds may be the source of funding if these or other projects going forward.

1. Civil engineering applications of PET (building on tire success)
2. California Healthy Soils Initiative: A study using calcium carbonate in selected applications
3. Expanding the DoubleGreen™ marketing concept to drive awareness

Recycled Product Procurement Grants

The Program launched grants to support procurement of products made from recycled carpet in 2016. These grants may be offered in future years based on available funding. Grants in this category are anticipated to continue to be modeled after the Cycle 1C grant solicitation issued in 2016, subject to refinement over time.

- Increase purchase of and confidence in a wide range of products made from recycled carpet.
- For California public agency procurement of recycled content products made from recycled carpet.

Micro-Grants for Reuse and Collection

The Program has not previously offered micro-grants. This is a Council idea that is incorporated in the Plan and may be considered if funds allow.

- Supports low- to medium-cost equipment and promotion to establish or improve reuse and collection.
- For reuse centers, collector/sorters, retailers, haulers, disposal sites, agencies, processors, and schools/universities.

Design Grants

The Program has not previously offered design grants. No specific funding amount is currently allocated, although design grants could be made available in the future as needed to meet Program goals.

- Support design R&D leading to recyclability and recycled content use and to accelerate industry adoption of new innovations.
- For Carpet Mills, manufacturers of recycled content products, and universities.

Other Financial Incentives

Subject to available funding, the Program may apply other financial incentives, including but not limited to the following options:

- Reuse market development to foster demand for used broadloom and tile carpet.
- Collection market development to strengthen markets for collection services.
- Recycled output market development, including potential focus on technology innovations, increased quantity (yield), quality improvements, and increased demand from recycled content manufacturers.
- Recycled product market development, such as new product development, increased demand for existing products, and product improvements.

- Recyclability market development, including designing for recycling, upcycling, and closed-loop methods.
- Diversion market development, including energy recovery, exports, and other forms of diversion.

Research & Development (non-grants)

Other non-grant R&D activities to be considered during the Plan period as opportunities arise include:

- Convenient collection R&D
- Reuse opportunities R&D
- Closed-loop, biomimicry, cradle-to-cradle, or green chemistry design R&D
- Policy and construction analysis R&D
- Label and certification R&D

Technical Assistance

Potential technical assistance activities may include the following:

Reuse

- Help establish and/or promote reuse programs and opportunities.

Collection

- Increase public drop-off locations at disposal sites.
- Support retailers in obtaining collection service.

Market development

- Improve recycled output quality and quantity; scale existing secondary markets; increase number and type of secondary products using recycled output; support testing/infrastructure.
- Increase number and type of secondary products using recycled output, increase upcycling, takeback and carpet-to-carpet closed-loop products; support testing/infrastructure.
- Support recyclability advances, accelerate adoption of new technologies (e.g., Niaga technology), support R&D for innovation, closed-loop, upcycling, biomimetic design, green chemistry, etc.
- Coordinate with CalRecycle and Department of General Services (DGS) to expand and promote recycled carpet content products under State Agency Buy Recycled Campaign (SABRC), Recycling Market Development Zones (RMDZ), and other databases.

F. MARKET DEVELOPMENT

California Carpet Stewardship Plan 2017–2021

Education

- Collaborate with GoBiz, RMDZ, DGS, and CalRecycle to leverage resources, grants, and support for California facilities.
- Promote the adoption of environmentally preferable purchasing (EPP) policies for local governments and businesses, and promote procurement of recycled content and recyclable carpet products through a continuation of the collaborative product presentations with CalRecycle focusing on the introduction of DoubleGreen™ brand.
- Develop consumer-facing recycled products web portal.
- Further develop of “Buy Recycled” campaign and online resources to promote available products.
- Leverage Carpet Mills’ sales representatives to educate retailers and, in turn, to inform customers.
- Education, outreach, and promotion related to Market Development (including EPP policies and PCC promotion) are covered in *Section H. Education and Outreach*.

G. Financing Mechanism

This section presents the financing mechanism budget for 2017 and the guiding principles used to develop the budget for the remaining periods of the Plan. The budget is based on an increase of the assessment to \$0.25 per square yard of carpet sold, effective January 2017. Noticing for this assessment increase began in September 2016.

This Plan will include the specific funding amounts that will provide sufficient funding to carry out the Program, including the administrative, operational, and capital costs of the Plan; payment of fees; and incentive payments that will advance the purposes of AB 2398. CARE has consulted with the flooring industry to ensure, pursuant to PRC Section 42972(c)(2), that the amount of the fees described in this Plan do “not create an unfair advantage in the marketplace.”

CARE is and must continue to be sensitive to the fact that—unlike other products subject to stewardship fees in California such as bottles, paint, and mattresses—carpet products have customer-accepted, viable, competitively priced, and readily available alternative floor covering options, including wood, vinyl, ceramic, stone, engineered wood, and rugs. As foreseen by the Legislature, the fee assessment under AB 2398 will influence California consumers’ purchasing choices and, if the fee is allowed to become too high, will negatively affect the competitive marketplace. Any future consideration of increased fees will need careful thought and study to ensure that the mandate of AB 2398 for a fair marketplace is maintained. With this in mind, this Plan continues to balance the positive potential effect of more fee revenue to meet diversion and recycling goals with the potential of negative disruption of the marketplace.

In keeping with the California Code of Regulations, Section 18943(a)(7), the financing mechanism for the Plan includes the following elements:

- A carpet stewardship assessment per square yard of carpet sold in California.
- A budget that includes revenue estimates from the assessment, full program costs, and administrative costs, including service payments to CalRecycle.
- A requirement that any surplus funds will be put back into the Program to reduce the costs of the Program, including the assessment amount.
- An assessment amount that is sufficient to meet, but not exceed, the anticipated cost of carrying out the Plan.
- An assessment amount that does not create an unfair advantage in the marketplace.
- An allocation of funds that support the solid waste management hierarchy and program performance goals identified in the stewardship Plan.
- The stewardship organization and Carpet Mills shall allocate revenues and expenditures applicable to this Program in accordance with Generally Accepted Accounting Principles (GAAP).
- The Plan shall describe how the collection and expenditure of carpet assessment funds shall be kept separate from other activities of the stewardship organization, and Program receipts and expenditures will be reviewed by an independent auditing firm.

G. FINANCING MECHANISM

California Carpet Stewardship Plan 2017–2021

The following guiding principles were used to develop the financing mechanism:

1. Maintain a carpet flooring industry that is both sustainable and viable.
2. Comply with the requirements of AB 2398. The goals established in the Plan shall exhibit a path toward continuous and meaningful improvement.
3. Meet the goals of AB 2398 to provide incentives for the following:
 - a. Increase recyclability of carpets.
 - b. Incentivize market growth of secondary products made from post-consumer carpet.
 - c. Increase recycling of post-consumer carpet.
 - d. Increase diversion of post-consumer carpets from landfills.
 - e. Provide for reasonably convenient collection opportunities in each county.
 - f. Increase processing and manufacturing capacity within the State and increase jobs.
4. Achieve economic sustainability, including the following:
 - a. Funds should maximize increased long-term use of post-consumer recycled carpet content in new and existing products.
 - b. Funds utilization is prioritized for actual output (i.e., performance, rather than potential opportunities)
 - c. Funding may also be utilized to develop capacity and accelerate growth.
 - d. Collectors' market prices should provide economic basis for supporting goals.
 - e. Subsidy funds are paid out monthly to assist with participant cash flow and provide more timely market intelligence to aid responsiveness to market dynamics.
 - f. Carpet Mills report quarterly to remit assessment funds and provide other data.
 - g. The Program will develop and utilize tools (such as economic model, cash-flow analysis, etc.) to analyze financing scenarios and recommend most effective options to meet the goals of AB 2398 while preserving the integrity of the fund itself.
 - h. The fund should minimize administrative costs.
 - i. Program delivery services shall be considered implementation rather than administrative costs.
 - j. The fund should be economically healthy by maintaining a reserve, currently set at a 1 quarter average based on the total expenses of the prior 4 quarters.
 - k. The fund cannot borrow even from anticipated future assessments.
5. Stewardship fund management hierarchy:
 - a. Funds will be managed in line with the waste hierarchy.
 - b. Priority is on funding Type 1 and manufacturer recycled output materials.
 - c. Define cap to single entity to support broad user base.
 - d. Energy recovery use should be used to enable the achievement of recycling goals and provide diversion opportunities for materials that cannot be recycled, while more economic end uses are developed and strengthened.
 - e. Diminish use of program funds for energy recovery over time.
6. The funding mechanism may be adjusted as needed, based on market conditions and progress made to meet or exceed the Plan goals for AB 2398.

G. FINANCING MECHANISM

California Carpet Stewardship Plan 2017–2021

The SPC has taken into consideration many ideas from many sources, including the Council, for influencing the supply chain, such as installer incentives and payment of drop-off site tip fees. Current funding is not sufficient to add such large increases in subsidies at this time. It would be impossible to cover all the options discussed over hundreds of hours of meetings, analysis and brainstorming. The underlying strategy to build flexibility in the Plan was to allow for the use of any and all such tools as the market dynamics dictate. The fact that they are not explicitly laid out at this point in time is due to the dynamic and rapidly evolving issues CARE is responding to. However, there are specific Council-related ideas that are incorporated into the 5-Year Plan and these have been laid out on page 70 in the section on *California Council on Carpet Recycling*.

The current subsidy structure is based on experience gained over the last 6 years informed by market feedback. For example, PET subsidies were increased from 12 cents per pound to 17 cents per pound, and then to 25 cents per pound. CARE is holding the subsidy level at 25 cents per pound because solid development interest emerged at that price point. The same is true for calcium carbonate which started at 7 cents per pound and moved to 12 cents per pound and finally 17 cents per pound. It is reasonable to expect that once markets are established such subsidies might be adjusted downward, but at levels that maintain continued usage.

Given the solid growth CARE is now seeing in recycled output (which includes time for incubation and market uptake) after the increased subsidies and grants implemented in 2015, the formula now appears to be delivering desired outcomes and should be given adequate time to develop given response time can take from 6-12 months or more.

CARE has developed an economic forecasting model under contract with Louis Berger Company. The model, which is now in the initial stages of implementation, has been reviewed with CalRecycle. The model enables CARE to run various market scenarios to inform the decision-making process regarding subsidies and other incentives. The model takes into account global, U.S., and California-based macro-economic data from independent sources, some of which are published by the State of California, to make forecasts. CARE also plans to review the refined economic model with the California Council on Carpet Recycling in 2017 once a contract is finalized for model maintenance and analytical support. At this time, the model has not been tested. Part of this Plan is to develop the model and gain experience in its application to further refine financial decision-making.

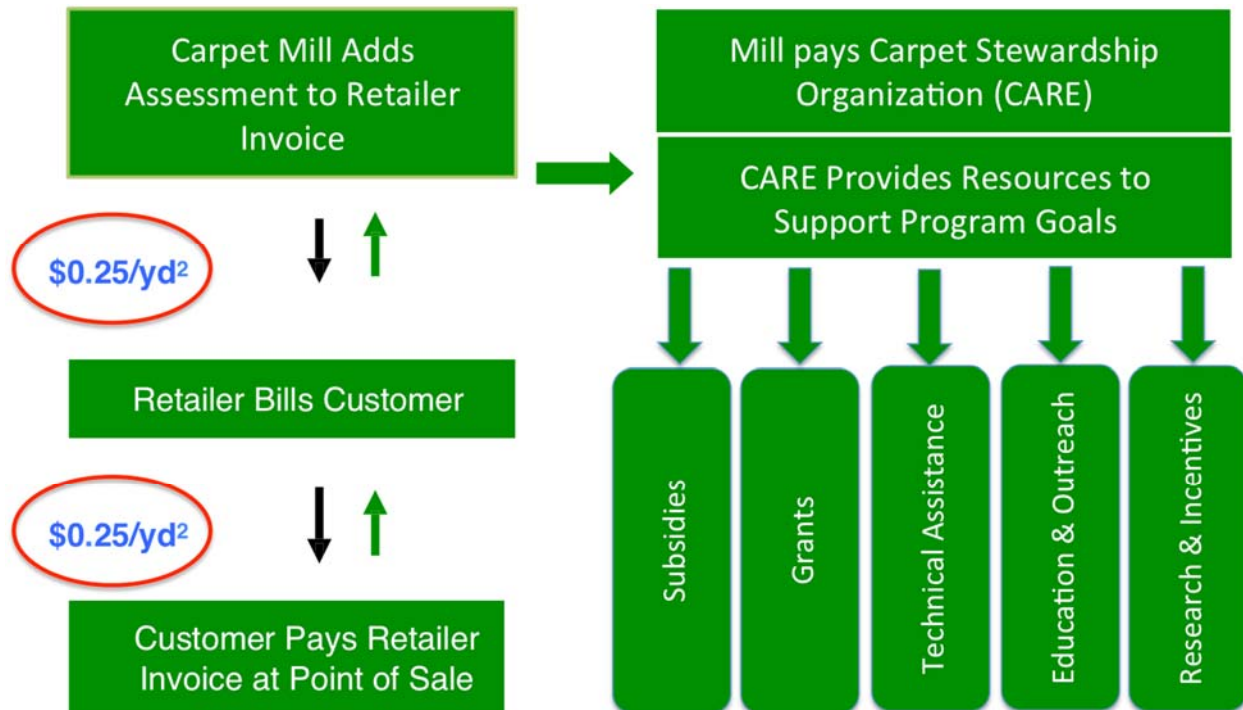
More recent developments regarding N6 are now being discussed under the provisions of the new Plan. In addition, CARE is now looking to also incorporate economic model guidance in our subsidy deliberations. The model is currently at a stage where we have an initial degree of confidence that it can be refined and used to conduct what-if scenarios on price movement and differentials for virgin vs. recycled polymers.

Table 2 presents the proposed financing mechanism budget for the Plan period of 2017, including anticipated revenues, expenses, and net income. During each calendar year of the Plan, CARE will reforecast a budget for the following calendar year such that a budget period of at least one full calendar year is available. Experience has indicated that the dynamic market conditions do not allow for meaningful forecast beyond one full year.

Assessment Remittance

Since the Program launched in 2011, retailers and dealers have been partners in helping California achieve its carpet recycling goals by collecting and remitting the Carpet Stewardship Assessment. For retailers or dealers, the Carpet Stewardship Assessment is charged by the Carpet Mill(s) as an after-tax line item on all invoices for carpet sold or shipped into California. In turn, retailers and dealers are responsible for including the assessment as an after-tax line item on all consumer invoices for carpet sold in California at the point of sale. Carpet Mills remit the assessment collected from retailer/dealer sales on a quarterly basis to a third party accounting firm. Upon receipt, CARE manages these funds to support recycling of post-consumer carpet. When retailers and dealers pay Carpet Mill invoices that include this assessment, retailers and dealers are doing their part in remitting the assessment. Examples of invoices and other materials to support retailers, dealers, and Carpet Mills are available on the CARE website. Figure 3 shows how Program assessment funds are collected and distributed.

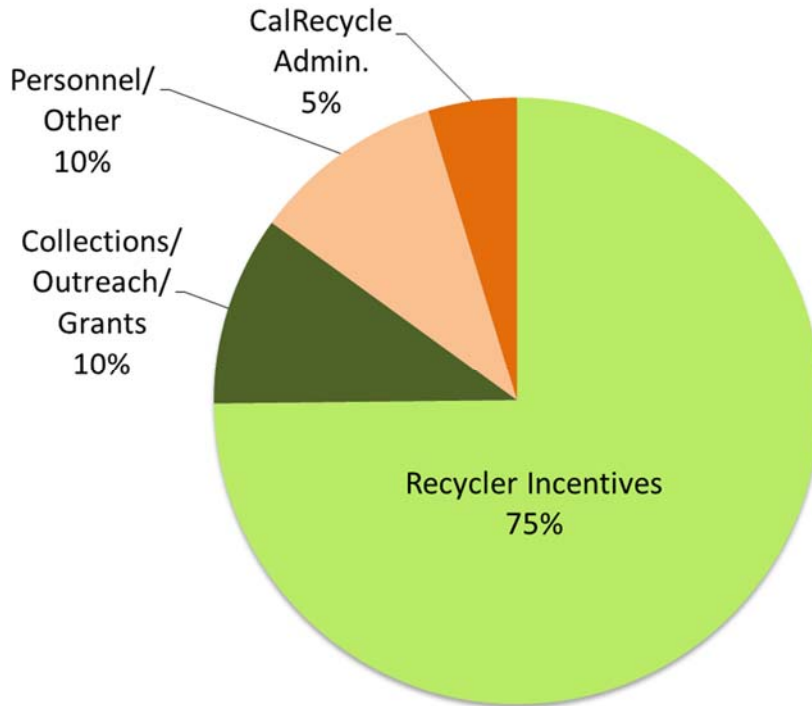
Figure 3. Flow of Assessment Funds



Program Expenditures

Funds collected through the assessment are used to fund various program resources offered under this Plan, which may include subsidies, grants, technical assistance, education and outreach, research and development or other incentives. As shown in Figure 4, approximately 75% of Program funds were distributed as recycler incentives in 2015.

Figure 4. Program Expenditures, 2015



The following budget provides estimates by budget category for the term of the Plan. CARE retains the ability to shift budget between line items based on total available funds and Program priorities as market conditions change or as needed to achieve Program goals throughout the Plan term.⁵

The dynamic markets in which this program operates has demonstrated that long-term forecasts and detailed budgeting beyond 12 months will not produce meaningful information. The following presents a five-year look at the Program based solely upon information we have presently and assumes that the structure of the subsidies will remain constant throughout the five-year period. This will not happen, and changes in the Program subsidies, grants, programs, and other expenses will be modified over time

⁵ It is worthy of note that California sales of new carpet have been declining each year since this program began, although sales for the remainder of the country continue to grow. Thus, the base assumption has been made that sales in California will be flat over the 5-year life of this Plan at 95 million square yards per year. If sales continue to decline, revenue will be reduced. It is the opinion of CARE that sales will not likely exceed this annual sales estimate.

G. FINANCING MECHANISM

California Carpet Stewardship Plan 2017–2021

to reflect new market conditions and changing circumstances. We have developed, with the assistance of the Council, many program ideas and initiatives which will be used over the five-year Plan period to address changing needs. As with the first five-year Plan under AB 2398, we fully expect that Year 5 of the new Plan will look much different than Year 1 of the new Plan.

Table 2. California Carpet Stewardship Program Budget, 2017-2021*

Budget Draft 5 Year 2017 - 2021	2016 Actual	2017 Budget	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Beginning Fund Balance**		\$3,840,000				
Assessments						
AB 2398 Assessment (\$0.25 per sq yd as of 01/01/17)	\$16,624,000	\$23,750,000	\$23,750,000	\$23,750,000	\$23,750,000	\$23,750,000
Total Actual Assessment Dollars	\$16,624,000	\$23,750,000	\$23,750,000	\$23,750,000	\$23,750,000	\$23,750,000
Subsidy Payouts						
CSE Payout Category						
CSE Reporting Incentive	\$35,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000
Tile REUSE	\$40,677	\$44,433	\$49,120	\$53,807	\$58,494	\$63,979
Whole Carpet Shipped and Sold for recycling (CSEs)	\$176,835	\$141,274	\$155,401	\$163,171	\$171,330	\$182,163
Whole Carpet Shipped and Sold for recycling (Processors)	\$714,481	\$1,488,750	\$-	\$-	\$-	\$-
Total All CSE Payouts	\$966,993	\$1,710,457	\$240,521	\$252,978	\$265,824	\$282,142
Processor Payout Category						
Tile REUSE	\$17,671	\$80,192	\$88,651	\$97,110	\$105,569	\$114,028
Broadloom REUSE	\$34,245	\$25,568	\$28,265	\$30,962	\$33,660	\$36,357
Tile RECYCLED	\$130,695	\$254,707	\$281,575	\$308,443	\$335,311	\$362,179
Type 1 Standard Payout	\$3,309,699	\$3,296,547	\$3,644,285	\$3,992,024	\$4,339,762	\$4,687,501
Type 1 Variable Payout	\$-	\$2,197,698	\$2,429,524	\$2,661,349	\$2,893,175	\$3,125,000
Type 2 Filler/Other	\$5,064	\$7,895	\$8,728	\$9,560	\$10,393	\$11,226
Calcium Carbonate	\$409,990	\$1,020,000	\$1,190,000	\$1,360,000	\$1,530,000	\$1,700,000
Type 2 CAAF	\$1,983	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
Type 2 Kiln	\$102,147	\$253,710	\$266,395	\$279,715	\$293,701	\$308,386
Adjustments	\$(4,000)	\$-	\$-	\$-	\$-	\$-
Total All Processor Payouts	\$4,007,494	\$7,139,316	\$7,940,423	\$8,742,164	\$9,544,571	\$10,347,677
Manufacturer Payout Category						
Non-Nylon Tier 2	\$4,435,739	\$11,110,256	\$12,282,229	\$13,454,202	\$14,626,175	\$15,798,148
Growth Bonus	\$674,295	\$-	\$-	\$-	\$-	\$-
Adjustments	\$(8,829)	\$(6,365)	\$-	\$-	\$-	\$-
Total All Manufacturers Payouts	\$5,110,034	\$11,103,891	\$12,282,229	\$13,454,202	\$14,626,175	\$15,798,148
Total Subsidy Payouts	\$10,084,521	\$19,953,665	\$20,463,173	\$22,449,344	\$24,436,570	\$26,427,967
Program Expenses						
Accounting	\$291,759	\$288,250	\$298,750	\$307,000	\$314,000	\$321,000
Legal Expense	\$37,116	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000
CARE Expenses	\$28,755	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
CARE Salaries & Staffing	\$519,086	\$764,142	\$779,566	\$795,453	\$811,817	\$828,672
CARE Travel	\$78,664	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Professional Services	\$369,028	\$250,000	\$350,000	\$400,000	\$400,000	\$450,000
PET Project Allocation	\$-	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000
Independent Insurance	\$2,045	\$7,500	\$8,000	\$8,000	\$8,000	\$8,000

G. FINANCING MECHANISM

California Carpet Stewardship Plan 2017–2021

Budget Draft 5 Year 2017 - 2021	2016 Actual	2017 Budget	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
University Grant-UCONN	\$187,507	\$-	\$-	\$-	\$-	\$-
Increase Education & Outreach (MEO)	\$678,027	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
Collection Program	\$759,144	\$2,000,000	\$2,300,000	\$2,660,000	\$2,876,000	\$3,113,600
Product Testing	\$18,348	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000
Municipal Grant Program	\$-	\$500,000	\$-	\$-	\$-	\$-
CalRecycle Administrative Expenses	\$506,563	\$1,187,500	\$1,187,500	\$1,187,500	\$1,187,500	\$1,187,500
California Council (CCCR Advisory)	\$31,548	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
Modeling Consultant	\$134,579	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Miscellaneous	\$-	\$-	\$-	\$-	\$-	\$-
Technical Assistance	\$-	\$250,000	\$200,000	\$200,000	\$200,000	\$200,000
Total Program Expenses	\$3,642,169	\$6,242,392	\$6,118,816	\$6,552,953	\$6,792,317	\$7,103,772
Grant Program to Generate New Pounds						
Total Grants Program	\$665,257	\$997,038	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
Grants - Product Development	\$64,257	\$113,872	\$-	\$-	\$-	\$-
Grants for Capacity Expansion	\$601,000	\$883,166	\$-	\$-	\$-	\$-
Grants - Financial Incentives	\$-	\$-	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
Total Budget Estimations						
Total Subsidy Payout	\$10,084,521	\$19,953,665	\$20,463,173	\$22,449,344	\$24,436,570	\$26,427,967
Total Program Expenses	\$3,642,169	\$6,242,392	\$6,118,816	\$6,552,953	\$6,792,317	\$7,103,772
Total Grant Expense	\$665,257	\$997,038	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
Total Program Budgeted Expenses	\$14,391,947	\$27,193,094	\$28,081,989	\$30,502,297	\$32,728,886	\$35,031,738

* Assumes sales flat at 95 million square yards.

**Beginning fund balance from 12/31/2016 bank statement/balance sheet.

H. Education and Outreach (E&O)

CARE's California education and outreach (E&O) tactics are focused on increasing awareness, adoption of desired practices and effectiveness of communication in the carpet recycling ecosystem. The Program uses marketing-based metrics to assess the effectiveness of the outreach efforts. The marketing tactics are created to support the Program's efforts around market development (leading to increased **recycled output**) and increasing **diversion rates**. It is our assumption that outreach success will contribute to operational success. The outreach plan is not designed to be directly correlated to operational program goals such as increasing recycled output. All marketing/outreach tactics are directly related to support providing information to the targeted audiences identified in the Plan and the legislation in order to encourage the behavior change necessary to meeting the Program's goals. For example, as the Program informs more installers about the new CARE drop-off site in their area that accepts carpet for recycling at a reduced fee, we expect that more carpet will be diverted from landfill to that site.

How E&O Supports Increasing Diversion Rate

To increase the **diversion rate**, several audiences need different kinds of outreach.

Retailers: At first, California retailers needed to be alerted to the Program in general, to its requirements, and to the assessment increases (we have conducted three assessment increase campaigns since 2015, which take 3 months and involve multiple marketing channels.) Following extensive work in 2015-2016, the universe of retailers has now been clarified and the majority contacted individually. In 2017 and beyond, the focus for retailers moves toward providing them information about drop-off opportunities and collateral (signs and brochures) that explains the carpet recycling process and its advantages to retailers, their customers, and the installers with whom they have relationships.

Installers: Installers are a hard-to-reach group but are key to diverting carpet to be recycled and away from landfill. CARE has entered into an agreement with Certified Flooring Installers' Robert Varden, an experienced flooring installation instructor, to conduct a series of installer trainings in California in 2017. CARE will provide scholarship support and will support Varden with handouts and a PowerPoint presentation on carpet recycling. CARE will help to promote the trainings while capturing the participants' information in order to continue to communicate with them afterwards. The goal is to reach 200 installers with these trainings in 2017 and to continue this relationship with Varden, assuming it proves fruitful.

The Program currently provides installer-focused custom handouts to its drop-off sites to encourage installers to recycle the carpet they tear out and to advise on how it should be prepared. That service will continue to drop-off sites in 2017 and beyond.

H. EDUCATION AND OUTREACH (E&O)

California Carpet Stewardship Plan 2017–2021

The Program is working to communicate further with installers via the retailers with which they work, and it is growing a database of installers in the state. In 2017, as part of the Regional Strategy described below, the Program will also conduct appearances at installer supply distributors.

A note on Commercial Contractors: We are aware that commercial carpet needs considerable outreach, but the Program is currently hampered by the lack of outlets for recycling commercial broadloom carpet. However, with the aid of a CARE grant, a new processor is siting a facility in California which is designed to include processing of commercial carpet. As such opportunities are established, the Program will consider initiating a more direct communications plan to engage commercial contractors and building owners who may be generating commercial carpet discards.

Drop-off Sites: Key to improving diversion is to increase not only the number of drop-off sites in the state, but also to improve how they communicate, so that the right audiences know where the sites are and how to use them. CARE currently supports each new drop-off site with signage and custom, bilingual flyers to distribute to the installers and others who will bring carpet to the site. A survey of the current sites conducted in late 2016 shows support for the signs and flyers, with most respondents rating them very or somewhat useful. We have noted that drop-off sites do not always list carpet or give clear instructions on their websites. In 2017, we will be offering marketing advice and support, such as sample website copy, to installers to encourage them to feature carpet more prominently. In 2016, we ran test search engine ads to raise awareness of local drop-off sites in Los Angeles and Napa, with good results. This pilot program will continue in 2017 and beyond as part of our Regional Strategy (see below.)

How E&O Supports Market Development

Increasing recycled output involves supporting the efforts of the market development and grant programs of the California Carpet Stewardship Program. Market development for CARE consists of supporting the creation of more products using recycled carpet and by increasing demand for these products.

CARE's strategy around **market development** focuses on supporting and increasing the number of processors that take post-consumer carpet and make it into useful products, including more carpet and padding as well as products such as insulation, plastic lumber, erosion control, and signage. E&O supports product testing and capital improvement **grant programs** with stakeholder communication via email, webinars, website content, and handouts.

E&O supports communication with stakeholders and potential grantees about procurement grants, designed to increase demand for these recycled carpet products. The grants are supported via e-news, media releases, website copy, and webinars. In January 2017, CARE will table at the California Association of Public Procurement Officials (CAPPO) conference to reach and engage the public officials most likely to be interested in procurement of recycled carpet products. The Program will provide handouts and other support for CARE staff attending this and future conferences.

E&O Regional Strategy

Given the size of the state and the varying levels of drop-off site service, the E&O strategy beginning in 2017 will take a regional approach, targeting two regions that meet criteria around drop-off site quality, availability of processors of post-consumer carpet and number of retailers in order to maximize effectiveness with a budget that will not allow for full statewide communication efforts. We have identified the Sacramento area as the first targeted region and will employ CARE staff, the retailer outreach team and focused communication tactics (online and in-person) to raise awareness of carpet recycling opportunities by promoting the drop-off sites, visiting retailers, local government staff and installers and conducting public awareness for consumers (for example, Google ads aimed at informing the public about their local drop-off site.) CARE will assess the results of these regional approaches to try and better understand the potential connection in increased use of carpet recycling and an improved diversion rate. Learnings will then inform our efforts in subsequent regions.

The Plan incorporates continuing education and outreach efforts to consumers, commercial building owners, carpet installation contractors, and retailers to promote their participation in achieving this Plan. The Plan's primary goals for education and outreach (E&O) are to:

- Establish communication networks and channels among key target audiences (retailers, installers, collection sites, and local government).
- Raise positive awareness of CARE, the California Carpet Stewardship Program, and AB 2398 through increased staff and outreach activities.
- Measure and increase compliance with requirements of AB 2398 among retailers.

E&O funding is proposed to be increased from \$600,000 in 2016 to \$750,000 annually, to increase the Program's staffing and outreach team to expand E&O activities to reach targeted audiences. The Program has focused on building strong positive relationships with retailers; establishing relationships with installers and recycling coordinators; and creating channels for reaching collection sites, Carpet Mills, nongovernmental organizations, and other stakeholders in the carpet recycling ecosystem. Activities in 2017 and beyond will focus on further raising awareness and changing behavior among the stakeholder audiences of the Plan and advancing initiatives to meet the Program's goals.

Education and outreach aimed at the general public (consumers at time of purchase) will have greater emphasis in the new Plan, as more opportunities for carpet diversion, recycling, and reuse are developed, including new products with post-consumer content. Consumers are primarily reached through education and outreach efforts aimed at key target audiences, providing resources and information for such groups to communicate with consumers at points of sale, disposal, or other action opportunities.

The goals of the Program have various target audiences, as shown in Table 3 below, with their own audience-specific strategies noted below. Strategies to reach audiences will be modified based on market research during planning period.

H. EDUCATION AND OUTREACH (E&O)

California Carpet Stewardship Plan 2017–2021

Table 3. Program Goals and Targeted Audiences for Education and Outreach Activities

Goal	Audience
Increase carpet recyclability	Carpet Mills, secondary manufacturers, consumers*
Increase post-consumer carpet reuse	Contractors, installers, NGOs, consumers, building owners*
Increase post-consumer carpet recycling	Collection sites, retailers, processors, local government, installers, building owners, consumers*
Increase market growth of new products made with post-consumer recycled carpet content.	Local government, builders, processors, secondary manufacturers, consumers*
Increase post-consumer carpet collection	Collection sites, retailers, collectors/sorters, installers, building owners, consumers*

*Consumers refers to anyone who purchases carpet for commercial or residential purposes.

Audience-Specific Education and Outreach

Audience-specific education and education will be targeted to each stakeholder group and may include such tactics as those listed below, but not limited to, the following examples presented in each category. Precise tactics may be modified over the course of the term to meet evolving program needs and response to changing market conditions.

Retailers

- Continue retailer contacts through outreach team; prioritize areas where new collection sites allow us to “lead with good news.”
- Research and engage new retailers.
- Notify all retailers of new services and changes to assessment.
- Refine compliance process; revisit non-compliant retailers.
- Leverage retailer outreach to identify and educate installers through collateral materials.
- Educate Carpet Mill representatives to educate retailers; work with them to promote closed-loop infrastructure and general knowledge.
- Survey “high-volume” retailers to understand waste flow and barriers to improvement.
- Possible “Buy Recycled and Buy Recyclable” campaign in later years.

H. EDUCATION AND OUTREACH (E&O)

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Installers

- Expand installer communication list through list rentals/purchases, advertising in industry publications, on-site visits and conferences/trainings.
- Refine training materials and additional installer-focused collateral.
- Ensure that communications and collateral include selected other languages as appropriate and as resources allow. Up to as many as 6 languages statewide and a maximum of 3 languages in any region.
- Directly engage installers who hold regional contracts with big box stores (e.g., Lowe's, Home Depot).
- Outreach to contractors, building associations, builder exchanges, and local government planning & building departments if feasible within budget.

Local Government: Recycling Coordinators and Procurement Staff

- Promote Buy Recycled procurement of products made with recycled carpet content.
- Inform about SABRC, EPP with local government, joint powers authorities, and waste agencies.
- Promote adoption of Environmentally Preferable Purchasing (EPP) policies with state/local governments and businesses.
- Provide regular information/reminders to be included in Recycling Guides, newsletters, websites, and social media.
- Work with local governments to place information with haulers (e.g., bill inserts).
- Work with local governments to coordinate with waste agencies within their region, outreach to commercial businesses, coordinate with planning and building departments, and the like, as budget allows.

Collection Sites

- Support current and added sites with signage, brochures, sample press releases, and the like.
- Work with local government and haulers to promote new and added sites to public.

General Public and Nongovernmental Organizations (NGOs)

- Engage reuse centers, NGOs, and nonprofits through technical assistance to foster reuse.
- Research primary barriers to carpet recycling; focus group on messaging.
- Focus on areas with viable, convenient recycling opportunities first with communications plan (e.g., convenient collection sites).

H. EDUCATION AND OUTREACH (E&O)

California Carpet Stewardship Plan 2017–2021

- Provide and promote content from the Carpet and Rug Institute (CRI) on:
 - Proper cleaning of carpet to prolong life, mitigate environmental impact.
 - Carpet recycling and recyclability.
 - Opportunities for carpet reuse (add section of web portal).
 - Buy Recycled purchase of products made with recycled carpet content.

Builders, Contractors, and Facilities Managers (new audience)

- Make contact (through trade associations and publications), establish partnerships, clarify their needs, and promote best practices on recycling, recyclability, and reuse.
- Identify mechanisms to engage commercial building owners, especially to promote commercial tile recycling and reuse, and as opportunities for commercial carpet recycling improve over time. May also include procurement promotion of recyclable and recycled content products.
- Create/adapt United Kingdom (CRUK) guide (www.fm-world.co.uk/good-practice-legal/how-to/reusing-or-recycling-used-carpet/) and promote.

Carpet Mills

- Work with Carpet Mill representatives to promote recyclable and recycled-carpet-content products through CARE’s web portal and other communications.
- Promote carpet back-stamping initiative that is underway by the carpet industry once fully implemented and beginning to show up in the recycle stream.

Cross-Audience Tactics and Ongoing Efforts

Cross-Audience tactics and other ongoing efforts may include activities such as, but not limited to:

- Expand email list.
- Develop audience-specific email communications in addition to monthly e-blasts.
- Monitor and respond to questions, comments, and concerns from multiple sources (social media, email, etc.).
- Fulfill collateral material requests from various stakeholders (retailers, local government, collection sites, etc.)
- Modify and add to web content – includes Procurement Portal; CARE website redesign and/or creation of separate, consumer-facing site in 2017–2018.
- Find/promote or create web tool to encourage/facilitate reuse.
- Increase social media efforts.
- Webinars.
- Workshops.

- Conference tabling and presentations.
- Earned media and placements of op-eds.
- Selective advertising in industry publications and on search engines.

Strategies to Support New Initiatives

- Expand and develop target audiences as new initiatives (e.g., subsidies, new products, services) warrant.
- Take advantage of existing communications from interested parties (e.g., hauler newsletters, local government websites, and collection site signage).
- Support new initiatives (e.g., financial incentives, services, product news) with print, digital and social media content.

Evaluation Metrics

The following table provides a list of metrics that may be used in evaluating the effectiveness of the Program’s education and outreach activities. These metrics are in addition to the operational data already collected and analyzed under the subsidy portion of the Plan. These metrics may be refined with time, based on feedback and efficacy.

Table 4. Education and Outreach Impact Metrics

Tactic	Metric
General Reach	
Industry publication advertising	Numbers reached
	Uptake of collateral requests
	Content consumption
Digital ads	Impressions (numbers reached)
	Click through rate (CTR)
Monthly E-News	List growth
	Open rate
	Click through rate (CTR)
	Content consumption
CARE website & California Program webpages	Traffic (Google Analytics)
	Pages visited
	Content added and consumed
	Uptake of call to action

H. EDUCATION AND OUTREACH (E&O)

California Carpet Stewardship Plan 2017–2021

Tactic	Metrics
Partner outreach (Carpet Mills, processors, sorters, etc.)	Number of contacts
	Positive feedback
	Uptake of call to action (sign-up for email alerts, etc.)
Events/conference presentations	Number of events
	Reach
	Follow-ups
Press releases/Earned media	Number sent
	Number of placements
	Feedback
Social media, including video creation and distribution	Number of posts and views
	Reach
	Increase in followers, amplification (shares)
Webinars	Number of events
	Number of participants
	Content consumed
Surveys / Stakeholder Workshops	Number of groups queried / number of responses
	Number of workshop attendees
	Feedback
	Quantity of results/action items
Retailers	
Print Collateral (brochures, window clings, FAQs, signage), including multi-lingual.	Number of copies requested/distributed
	Stakeholder feedback
	Number and length of website visits
In-person outreach	Number of businesses reached
	Uptake of call to action (brochure requests, webpage visits, etc.)
	Increased awareness of CARE and the California Carpet Stewardship Program
	Increased compliance with labeling and other requirements

H. EDUCATION AND OUTREACH (E&O)

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Tactic	Metric
Local Government	
In-person outreach	Number of recycling coordinators / other government staff reached
	Collateral requested and posted
	Increase/uptake of recycled carpet content procurement policies
	Uptake and amplification of provided content (e.g., posting to local government websites, social media and newsletters)
Installers	
Curriculum	Number of installers reached
	Feedback
Collection Sites / Rural County Program	
In-person outreach	Number of contacts
	Collateral requests
Consumers/Public	
Website	Traffic
	Number of visits to collector map
	Number of visits to consumer page
Video	Number of views
	Number of shares
Awareness	Collateral requests from retailers and recycling coordinators
Processors	
Survey	Number of responses
	Feedback

I. PROGRAM PERFORMANCE MEASUREMENT

California Carpet Stewardship Plan 2017–2021

I. Program Performance Measurement

The annual reports will include measurements of progress toward the six primary performance goals, as described in *Chapter C. Performance Goals and Activities*. Additionally, annual reports will include other metrics, which also serve as indicators of the Program’s progress. Metrics are listed below according to which, if any, performance goal they relate to and how they are calculated or are used to calculate other metrics. Much of the Program performance data draws on regular reporting to the Program or its independent surveys from Program participants, including Carpet Mills, collector/sorters, processors, and manufacturers. The Program and its participants will maintain records in accordance with the regulatory requirements, including making records accessible to CARE and CalRecycle upon request to determine compliance. Requirements related to record-keeping and retention are included in agreements with all Program participants.

Six Primary Performance Goals

1. Increase the recyclability of carpets.
2. Incentivize the market growth of secondary products made from post-consumer carpets.
3. Increase the reuse of post-consumer carpet.
4. Increase the recycling of post-consumer carpets.
5. Increase the diversion of post-consumer carpet from landfills.
6. Provide for reasonably convenient collection opportunities in each county.

Metric	Related Performance Goal	Notes on Calculations
Carpet Sold in California (sq. yds.)	4. Increase the recycling of post-consumer carpets. 5. Increase the diversion of post-consumer carpet from landfills.	Sales in Discards Formula
Post-Consumer Carpet (PCC) Discards (lbs.)	4. Increase the recycling of post-consumer carpets. 5. Increase the diversion of post-consumer carpet from landfills.	$((Sales * R) * P) + D + E$ <p>Where Sales= Sales in square yards (sq. yd.) in California R=Replacement rate P = average weight of carpet D = % of carpet from demolition projects that is not replaced E = % of carpet that is eliminated in a remodel and not replaced by carpet</p>
Gross Collection (GC) (lbs.)	1. Increase the recyclability of carpets. 5. Increase the diversion of post-consumer carpet from landfills.	
Yield (%)	1. Increase the recyclability of carpets.	$\frac{Recycled\ Output}{Gross\ Collections}$

I. PROGRAM PERFORMANCE MEASUREMENT

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Metric	Related Performance Goal	Notes on Calculations
Recycling Rate (%)	4. Increase the recycling of post-consumer carpets.	$\frac{\text{Recycled Output}}{\text{Discards}}$
Recycled Output (lbs.)	4. Increase the recycling of post-consumer carpets. 3. Increase the reuse of post-consumer carpet.	$\text{Reuse} + \text{Type 1} + \text{Type 2} + \text{Calcium Carbonate}$
Reported Diversion (lbs.)	5. Increase the diversion of post-consumer carpet from landfills.	$\text{Reuse} + \text{Recycled Output} + \text{Energy Recovery} + \text{Exports}$
Net Diversion (lbs.)	5. Increase the diversion of post-consumer carpet from landfills.	$\text{Gross Collections} - \text{Sorting waste} - \text{Processing waste}$
Diversion Rate (%)	5. Increase the diversion of post-consumer carpet from landfills.	$\frac{\text{Net Diversion}}{\text{Discards}}$
Total Cushion Diverted (lbs.)		
Reuse (lbs.)	3. Increase the reuse of post-consumer carpet.	$\text{Broadloom Reuse} + \text{Tile Reuse}$
Source Reduction (lbs./sq. yds.)		P in Discards Formula
Carpet as an Alternative Fuel (CAAF) (lbs.)		Input in Reported Diversion estimate
Kiln (lbs.)		Input in Reported Diversion estimate
Waste-to-energy (WTE) (lbs.)		Input in Reported Diversion estimate
Energy recovery (lbs.)		Input in Reported Diversion estimate $\text{CAAF} + \text{Kiln} + \text{Waste-to-Energy}$
Processing Waste disposal to landfill (LF) (lbs.)		Material leftover after processing sent back to landfill
Total PCC Waste Disposal to Landfill (lbs.)		$\text{Discards} - \text{Gross Collections} + \text{Sort Waste} + \text{Processing Waste}$
Funds Remitted (Revenue) (\$)		Assessment funds received quarterly from the Carpet Mills
Implementation Cost (\$)		Sum of total Program expenses
Greenhouse Gases (GHGs) (MTCO ₂ e)		Calculated using EPA WARM model

I. PROGRAM PERFORMANCE MEASUREMENT

California Carpet Stewardship Plan 2017–2021

Metric	Related Performance Goal	Notes on Calculations
California Green Job Creation		Reported Period Job Gains
Net California Jobs		Beginning Jobs - Jobs Lost + Jobs Gained, as reported
Total California Jobs		Active jobs as reported at the end of period
Number of recycled carpet content products in marketplace	2. Incentivize the market growth of secondary products made from post-consumer carpets.	Obtained through annual manufacturer surveys
Number of California Program drop-off locations	6. Provide for reasonably convenient collection opportunities in each County.	Count of CARE-supported drop-off sites and counties served
Number of private collection sites		Obtained through annual collector/sorter surveys

J. Stakeholder Consultation

To develop this updated Plan, CARE conducted extensive consultation with affected stakeholders and considered the existing infrastructure for carpet recycling and reuse. Consulted stakeholders include Carpet Mills, other stewardship organizations, service providers, state and local governments, nongovernmental organizations, haulers, demolition or other contractors, recyclers, retailers and wholesalers, installers, and consumers. This chapter summarizes recent and ongoing stakeholder consultation activities.

Key stakeholder consultation activities, described further below, include the following:

- California Council on Carpet Recycling
- Annual stakeholder workshops
- Online feedback forms through website
- Online feedback through CalRecycle public postings
- Other stakeholder outreach and communications as determined to be useful

California Council on Carpet Recycling

In October 2015, CalRecycle approved the creation of the California Council on Carpet Recycling (Council), a broad stakeholder group to provide insights, feedback, and suggestions to inform the California Carpet Stewardship Program. The Council's members include industry leaders from the waste, recycling, carpet, product stewardship arenas and the government, nonprofit, and business sectors. The Council is not a decision-making body.

From February through June 2016, Council members met in Sacramento for four all-day interactive workshops to make suggestions and help prioritize actions for consideration to be included in the updated California Carpet Stewardship Plan for 2017–2021. CalRecycle staff were invited to attend these meetings as observers.

The SPC met multiple times between March and September 2016. Council ideas were cataloged and discussed and considered how they fit into the 2017 Plan. In particular, the July 6, 2016, meeting included a detailed review (see Attachment 9) of all Council ideas and suggestions.

CARE distilled more than 200 ideas from the Council into approximately 67 ideas organized into six statutory focus areas listed below. Each idea and how it might be implemented was discussed in detail during the July 6, 2016 meeting. The SPC determined there was considerable merit to many of the ideas and elected to build a Plan that was flexible enough to allow implementation of any of the 67 ideas over the life of the Plan consistent with market feedback and economic consideration. The SPC recognized it could not implement all ideas, nor could many be implemented concurrently due to financial constraints. This was a major consideration in developing a Plan with as much flexibility as possible.

J. STAKEHOLDER CONSULTATION

California Carpet Stewardship Plan 2017–2021

Six Statutory Focus Areas:

- Reuse
- Recyclability
- Collection
- Recycled Output
- Diversion
- Market/Product Development

The following Council ideas are budgeted for implementation in the current Plan. In many cases several of these ideas are planned or already underway including:

- Hiring of a fulltime California Program Manager
- Conduct a “How to Increase Reuse” study
- Increase collection sites
- Increase staffing to expand E&O delivery to target audiences
- Increase outreach to installers
- Increase operations and customer support services support
- Build partnerships with other stewardship programs
- Conduct feasibility study to define “reasonably convenient collection”
- Promote SABRC procurement and adoption of EPP policies
- Collaborate with GoBiz, RMDZ, DGS, and CalRecycle to leverage resources, grants and support California facilities
- Micro-grants to facilitate reuse and collection

The Council will continue to meet periodically over the course of the 5-year Plan. Presently, it is anticipated that the Council will meet 2-3 times per year or as needed to support and inform the Program throughout the course of this five-year Plan update. As described in the Council’s guiding documents available on CARE’s website, CARE may release periodic Calls of Application/Nominations to solicit and select Council representatives as needed over the course of the Plan. CARE will review applications and select Council members.

CARE will review all major program changes with Council prior to implementation or submission to CalRecycle. CARE will evaluate all Council input for consideration consistent with maintaining a financially stable and viable program and provide timely feedback to the Council. The SPC/SFOC will have final decision-making authority.

Annual Stakeholder Workshops

CARE also consulted with stakeholders through Annual Stakeholder Workshops. Two workshops were held in 2016 in Irvine on March 8 and Sacramento on March 10. More than 1,000 CARE contacts were invited to participate. The five-hour workshops include presentations by CARE Executive Director Robert Peoples, California Program Manager Brennen Jensen, and Russ DeLozier, Director of Environmental Innovation at J&J Flooring (now Engineered Floors). The afternoon sessions featured a facilitated exercise (facilitated by Gigantic Idea Studios) to solicit ideas and input for the updated Plan. The workshops drew more than 75 attendees from various stakeholder groups including processors, manufacturers of recycled content products, retailers, collectors, local government representatives, transfer stations, and environmental nongovernmental organizations. CalRecycle was invited to attend and participate in these workshops.

CARE plans to hold these stakeholder workshops annually to solicit feedback on Program accomplishments and needs.

Online Feedback Forms

CARE provides an online form on its website where members of the public and other interested stakeholders can provide comments on the Plan and Program. CARE promotes this form through its regular “e-blast” communications.

Other Stakeholder Outreach and Communications

CARE periodically presents at conferences and other stakeholder gatherings to provide information about the Program’s activities and solicit stakeholder feedback, such as California Resource Recovery Association (CRRA) annual conference, CalRecycle's Recycling Market Development Zone (RMDZ) Zone Works conference, or local groups like the Redwood Empire Flooring Association meeting in Petaluma.

The Program’s general outreach efforts include the following:

- Monthly e-blast newsletters
- Regular blog articles
- Ongoing website updates
- Social media, including Twitter
- Webinars

The Program also conducts targeted outreach to these groups:

- Retailers
- Local governments
- Installers
- Drop-off sites
- Commercial building owners (new)

These activities are described further in *Section H. Education and Outreach*.

Specialized Workshop Series

CARE may develop and conduct specialized workshops, webinar series, or other stakeholder engagement to explore particular Program elements over the course of the Plan. These may be incorporated into existing annual stakeholder workshops, Council meetings, conference presentations, or be conducted as separate stand-alone events, as resources allow and communication needs dictate. Subject to available funding, CARE may develop potential workshop series on such topics as, but not limited to:

- Convenient collection.
- Increasing reuse.
- Improving recyclability for Carpet Mills.
- Buy Recycled – recycled carpet content procurement.
- Role of rebates for increasing consumer purchasing.

K. Audits

The Program’s annual reports will include audits of the financial statements of CARE and the California Carpet Stewardship Plan. An independent certified public accounting firm will conduct the audits.

The audit report will include:

- Square yardage carpet shipped into California for the reporting period (in aggregate).
- Assessments collected (in aggregate).
- List of non-compliant Carpet Mills who are registrants with the Plan.
- List of non-compliant retailers, as reported to CARE by Carpet Mills who are registrants with the California Carpet Stewardship Plan.
- Results of Agreed Upon Procedures (AUPs) conducted on the Carpet Mills and fund recipients during the reporting period.

The audit report on the California Carpet Stewardship Program will explicitly report on the Carpet Mill or stewardship financial statements as they relate to the Program and its compliance with Public Resource Code section 42970 and Title 14, Article 1, of the California Code of Regulations.

CARE will share with the accounting firm confidential information on sales and assessments on a quarterly basis and in aggregate form to protect the confidentiality of individual Carpet Mills. For all audits, CARE will direct the Certified Public Accounting firm to do the following:

- Perform certain Agreed Upon Procedures on the Carpet Mills and recipients of the carpet assessment funding to ensure compliance with the guidelines in AB 2398.
- Conduct audits in accordance with Generally Accepted Accounting Principles (GAAP) and Generally Accepted Government Audit Standards (GAGAS).

L. Environmental Information

CalRecycle’s 2012 review of the initial Plan found the following:

Based on the available evidence in the record and the environmental analysis presented in this document, there is **no substantial evidence that the proposed project would have a significant effect on the environment**. Therefore, it is proposed that a Negative Declaration be adopted in accordance with the CEQA Guidelines.” *(emphasis added)*

We do not anticipate any changes since that time that would result in adverse environmental effects. If CalRecycle requires additional environmental information, the Program can provide materials upon request.

Attachments

The Plan includes the below attachments.

1. Definitions
2. CARE Leadership
3. Summary of Subsidies
4. California Carpet Stewardship Plan Participants
5. California Carpet Recycling Drop-off Locations
6. Description of Subsidy Flow and Stacking
7. Monthly Reporting Forms
8. Education and Outreach Materials

Attachment 1. Definitions

Key terms used in this Plan are defined as follows.

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 article. CAAF replaces 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 collected (total includes material that may eventually be sent to landfill). Also referred to as Gross Collected.

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

Collector/Sorter: A business that provides carpet recycling collection services for retailers, disposal sites or other sites. Collector/sorters sort received PCC by material type for third-party reuse, or wholesale to Tier-1 processors for recycling. Collector/sorters do not convert material into recycled output.

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 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 (Net): Estimated total PCC removed from California landfills for reuse, recycle, CAAF, kiln or WTE. It is calculated as the difference of gross collected pounds minus PCC and process waste pounds that ultimately goes to landfill from processors or collectors.

Diversion (Reported): 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.

Education/Communication Costs: Refers to expenses incurred in support of Marketing, Education and Outreach (ME&O) efforts conducted under the Plan. Includes the cost of market development professional services, research and promotion, on-the-ground education and outreach support, communications, market research, collateral and materials development and related expenses.

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 rural county 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.

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 total Program implementation costs.

Gross Collection (GC): Actual pounds of PCC removed from waste stream for reuse, recycle, CAAF, kiln, or WTE, as reported to CARE by recyclers, 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, 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) costs and administration costs.

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

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

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

Manufacturer: A manufacturer of secondary products made with post-consumer carpet content. Manufacturers receive finished (Type 1) recycled output from 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 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 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.

Nongovernmental Entities (NGOs): Nongovernmental entities.

Post-Consumer Carpet 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.

Processor: Qualified recipient participating under the Plan, that use industry-recognized processes such as shredding, grinding, shearing, 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 manufacturers.

Program Administrative Costs: Includes all non-subsidy Program expenses, including: accounting, legal services, CARE facilities and operational expenses, staffing/contractor expenses, and marketing, education and outreach activities and professional services. Program administration also includes service payments (governance costs) to CalRecycle for Program oversight.

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 collected (this includes unrecyclable PCC carpet or carpet processing waste that may eventually be sent to landfill). Also referred to as Gross Collected.

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 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 material that results from the industry-recognized processing (shredding, shearing, hammer milling, depolymerization, etc.) of PCC from a Tier-1 processor. Examples of output include: fiber, shredded carpet tile, depolymerized chemical components, carpet filler, etc. The Program currently distinguishes between two types of material:

- **Type 1 Recycled Output Material:** Output of the materials with the most benefits to manufacturers of finished products. 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:** Output of the materials with benefit to manufacturers of finished products, but 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.

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

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

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 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/sorters.

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.

Attachment 2. CARE Leadership

CARE Board of Directors

The CARE Board of Directors currently includes 19 members, listed in Attachment below. Board members are unpaid, and they compose a multi-stakeholder group consisting of representatives of the carpet industry, entrepreneurs, government, the plastics industry, and suppliers to the carpet industry.

- Brendan McSheehy, Jr., *Chair* – Universal Fiber Systems LLC
- Joe Yarbrough, *Vice-Chair* – The Carpet and Rug Institute
- Russell Bennett – Tandus-Centiva
- Russ DeLozier – Engineered Floors, LLC (formerly J+J Flooring Group)
- Paul Devereux – Natural Transitions
- Don Dolan – Masland Contract
- Joe Foye – Mohawk Group Inc.
- Ron Greitzer – L.A. Fiber Company Inc.
- Philip Ivey – Milliken & Company
- Richard Kruse – Kruse Carpet Recycling
- Jim Lindsey – Aquafil USA
- Paul Murray – Shaw Industries Inc.
- Eric Nelson – Interface
- Robert Peoples – CARE, Executive Director
- Sean Ragiel – CarpetCycle, LLC
- Louis Renbaum – Wellman Plastics Recycling
- Stacey Washington – South Carolina Department of Environmental Control
- Fred Williamson – Starnet Worldwide Commercial and Flooring Partnership
- Marjaneh Zarrehparvar - PaintCare

CARE Stewardship Planning Committee Members

- Eric Nelson, *Chair* – Interface
- Russell Bennett – Tandus-Centiva
- Russ DeLozier – Engineered Floors, LLC
- Joe Foye – Mohawk Group Inc.
- Ron Greitzer – L.A. Fiber Company Inc.

- Paul Murray – Shaw Industries Inc.
- Joe Yarbrough – The Carpet and Rug Institute

CARE Sustainable Funding Oversight Committee Members

- Joe Yarbrough, *Chair* – The Carpet and Rug Institute
- Vance Bell – Shaw Industries Inc.
- Jay Gould – Interface
- Ron Greitzer – L.A. Fiber Company Inc.
- Jeffery Loberbaum – Mohawk Group Inc.
- Tom Pendley – Engineered Floors, LLC

Attachment 3. Summary of Subsidies

At the time of this Plan, the Program provides the following 13 subsidies.

#	Subsidy	Eligible	Payout	Notes
COLLECTION/SORTING				
1	Reporting incentive	Collector/sorters	\$1,000/period	Incentive paid per period; not subject to guarantee timeline
2	Sorting (whole carpet shipped and sold for recycling)	Collector/sorters ⁶	2 cents/pound (Payable for broadloom carpet only; 2 cents <u>not</u> payable for reuse pounds; <u>not</u> payable for carpet tile recycling) Cap: Maximum payout of \$150,000/quarter or \$400,000/year to any participant	Paid on pounds of PCC collected, sorted, shipped, and sold or donated for recycling May be reduced Q4 2017
REUSE				
3	Tile reuse	Collector/sorters Processors	10 cents/pound (pounds <u>not</u> eligible for 2-cent collection subsidy)	For materials shipped and sold or donated; Subject to adjustment, beginning Q4 2017
4	Broadloom reuse	Collector/sorters Processors	10 cents/pound (pounds <u>not</u> eligible for 2-cent collection subsidy)	For materials shipped and sold or donated; Subject to adjustment, beginning Q4 2017
PROCESSING (Tier 1)				
5	Tile recycling	Processors	10 cents/pound	For carpet tile only; Subject to adjustment, beginning Q4 2017
6	Type 1 recycled output (ash content less than 25%)	Processors	10 cents/pound	Subject to adjustment, beginning Q4 2017

⁶ Processors who also act as collector/sorters are also eligible for collector/sorter whole carpet shipped and sold for recycling subsidy; subject to per participant cap limitations listed above and future adjustments.

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California Carpet Stewardship Plan 2017–2021

7	Type 1 growth incentive	Processors	10 cents/pound Paid only on Type 1 pounds processed in excess of specified threshold, which may be adjusted quarterly; threshold set at 11 million pounds since Quarter 3 of 2014	Incentive, not subject to guarantee timeline; Deactivation anticipated Q1 2017
8	Type 2 recycled output (ash content above 25%)	Processors	3 cents/pound	Subject to adjustment, beginning Q4 2017
9	Calcium carbonate	Processors	17 cents/pound	Subject to adjustment, beginning Q4 2017
RECYCLED CONTENT MANUFACTURING (Tier 2)				
10	Manufacturer incentive for non-nylon recycled products	Manufacturers	25 cents/pound	Subject to adjustment, beginning Q4 2017
11	Manufacturer growth incentive for non-nylon recycled product	Manufacturers	10 cents/pound above threshold Paid only on Type 1 pounds used in the manufacturing of secondary products in excess of specified threshold, which may be adjusted quarterly; threshold raised to 3.5 million pounds effective Q3 2016	Incentive not subject to guarantee timeline; Deactivation anticipated Q1 2017
ENERGY RECOVERY				
12	Carpet As Alternative Fuel (CAAF)	Collector/sorters Processors	3 cents/pound	Subject to adjustment, beginning Q4 2017 CAAF/Kiln capped ⁷ at 15% of subsidy payouts
13	Kiln (as fuel alternative)	Collector/sorters Processors	3 cents/pound	Subject to adjustment, beginning Q4 2017 CAAF/Kiln capped ³ at 15% of subsidy payouts

⁷ The CAAF/Kiln subsidy cap is based on total subsidy expenditures as calculated on an annual basis; the cap is not applied to individual participating subsidy recipients, rather Program-wide.

Attachment 4. California Carpet Stewardship Plan Participants

#	Parent Company	Sub Companies	City	State	Country
1	ALLIANCE TEXTILES, INC.	METRO CARPET	Cartersville	GA	USA
2	ATM Floor Covering, Inc.		Dalton	GA	USA
3	Beaulieu Canada Company		Acton Vale	Quebec	Canada
4	Beaulieu Group LLC	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., BoYu, Cambridge, Citation, Compass, Coronet Carpets, Coronet SFC, Hollytex, Interloom, Laura Ashley, Property Management Solutions, Pure, Royalist, Surfaces	Dalton	GA	USA
5	Bellbridge Inc.		Benicia	CA	USA
6	Bentley Prince Street (BPS Parent, Inc.)	Bentley Mills, Inc., Bentley Prince Street, Inc., Bentley Holdings, Inc.	City of Industry	CA	USA
7	Berkshire Flooring		Dalton	GA	USA
8	Best Carpet Values, Inc./W.R. Inc.		Chatsworth	GA	
9	Bloomsburg Carpet Ind., Inc.		Bloomsburg	PA	USA
10	Brintons		Kennesaw	GA	USA
11	CAP Carpet Inc.	Aircraft Interior Products, White Oak Carpet Mills	Wichita	KS	USA
12	Carpet Crafts, Inc.		Dalton	GA	USA
13	CATALINA CARPET MILLS, INC.	CATALINA HOMES	Santa Fe Springs	CA	USA
14	Couristan, Inc.		Fort Lee	NJ	USA
15	Crossley Holdings of South Africa	Inc., Crossley Axminster	Greenville	MS	USA
16	Dalton Carpet Mart	Signature Hospitality Carpet LLC.	Dalton	GA	USA

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California Carpet Stewardship Plan 2017–2021

#	Parent Company	Sub Companies	City	State	Country
17	DALTONIAN FLOORING INC.		Calhoun	GA	USA
18	Design Manufacturing International, LLC	Cavan Carpets	Warminster	PA	USA
19	Design Materials, Inc.		Kansas City	KS	USA
20	ECMH, LLC	Cadence, Clayton Miller, Nood Fashion	Dalton	GA	USA
21	Emerald Carpet, Inc.		Dalton	GA	USA
22	Emery Park Carpet Company		Calhoun	GA	USA
23	Engineered Floors	Dream Weaver, Dwellings, Pentz, J&J Industries, Inc., J&J Flooring Group,	Calhoun	GA	USA
24	Fibreworks Corporation		Louisville	KY	USA
25	Forbo Flooring Systems	Flotex Carpet	Hazleton	PA	USA
26	Fortune Contract, Inc.		Dalton	GA	USA
27	Foss Manufacturing Co. LLC		Hampton	NH	USA
28	Godfrey Hirst USA, Inc.		Adairsville	GA	USA
29	Hibernia Woolen Mills		Whittier	CA	USA
30	iCarpetiles.com., Inc.		Louisville	KY	USA
31	Indian Summer Carpet Mills, Inc.	Cherokee Carpet, Northstar Flooring Design, Southwind Carpet	Dalton	GA	USA
32	Interface Americas	FLOR	Atlanta	GA	USA
33	J Mish LLC		Cartersville	GA	USA
34	Joy Carpets & Co.		Fort Oglethorpe	GA	USA
35	Kaleen Rugs, Inc.		Dalton	GA	
36	Kane Carpet	Weavemasters	Brooklyn	NY	USA
37	Kinsley Carpet Mills		Dalton	GA	USA
38	Kraus	Barrett Carpet	Clarion	PA	USA

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California Carpet Stewardship Plan 2017–2021

#	Parent Company	Sub Companies	City	State	Country
39	Lancer Enterprises, Inc.		Dalton	GA	USA
40	Langhorne Carpet Co. Inc.		Penndel	PA	USA
41	Lexmark Carpet Mills, Inc.	Northwest Carpet, Inc.	Dalton	GA	USA
42	LONESOME OAK TRADING CO., INC.		Chatsworth	GA	USA
43	Manassas Textiles, Inc. DBA Carpet Bagger		Adairsville	GA	USA
44	Mannington Mills, Inc.	Mannington Commercial	Calhoun	GA	USA
45	Marquis Industries, Inc.	Artisans Carpet, Artisans Hospitality, Astro Carpet Mills, Best Buy Flooring Source, Best Buy Hard Surfaces, Cornerstone Hospitality, Dalton Carpet Depot, Omega Pattern Works	Chatsworth	GA	USA
46	Mathews & Parlo Carpet Wholesalers, Inc.		Calhoun	GA	USA
47	Merida Meridian Inc.		Boston	MA	USA
48	Millennium Carpet Mills Inc.	Atlas Ind., Creative Carpet, Orion Carpet, Mill Creek	Chatsworth	GA	USA
49	Milliken & Company	Milliken Services LLC., Sylvan Chemical Co.	Spartanburg	SC	USA
50	Mohawk Industries, Inc.	Aladdin, Aladdin Manufacturing Corporation, Bigelow, Color Center, CustomWeave, Durkan, Floorscapes, Floorz, Galaxy, Helios, Horizon, Horizon Europe, Karastan, Lees, Mohawk, Mohawk Carpet, Mohawk Carpet Distribution, Mohawk Carpet Foundation, Mohawk Carpet Transportation of Georgia, Mohawk Commercial, Mohawk ESV, Mohawk Factoring, Mohawk Industries, Mohawk Resources, Mohawk Servicing, Nautilus, Portico, Portico Estate, Properties by Mohawk, Regency Grand, Wayn-Tex LLC, World, Wunda Weve	Dalton	GA	USA

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California Carpet Stewardship Plan 2017–2021

#	Parent Company	Sub Companies	City	State	Country
51	Nature's Carpet		Vancouver	British Columbia	Canada
52	Next Floor Inc.		Conestogo	Ontario	Canada
53	Nourison Industries Inc.	Div of Nourison, AeroSea, Nourison Home, Nourtex	Saddle Brook	NJ	USA
54	Phenix Flooring, LLC (Pharr Yarns, Dobbs Mill)	Looptex Mills	Dalton	GA	USA
55	Prestige Mills	Concepts International, Weavetuft Carpet	Long Island City	NY	USA
56	R.C. Willey Home Furnishings, Inc.		Salt Lake City	UT	USA
57	RADICI USA, INC.		Spartanburg	SC	USA
58	Relative Space (Floorworks)		New York	NY	
59	Riviera Carpets		Calhoun	GA	
60	Royalty Carpet Mills, Inc.	Camelot Carpet Mills, Pacificrest Mills, Moda	Irvine	CA	USA
61	Savnik & Company, Inc.		Oakland	CA	USA
62	SHAHEEN CARPET MILLS	CARPETS BY SIERRA, SIERRA CARPET MILLS	Resaca	GA	USA
63	Shaw Industries, Inc.	American Home Fashions of California, Cabin Crafts, Couture Elegant Floors by Shaw, HGTV Home - Flooring by Shaw, Kathy Ireland Home Solutions, Patcraft, Philadelphia Commercial, Philadelphia Residential, Queen, Queen Commercial, Shaw, Shaw Contract Group, Shaw Home Foundations Flooring, Shaw Hospitality, ShawMark Home, Sutton Carpets, Tuflex	Dalton	GA	USA
64	Signature Hospitality Carpet LLC	Dalton Carpet Mart, Signature Accord	Dalton	GA	USA
65	Stanton Carpet Corporation	Antrim Carpets, Rosecore, Royal Dutch Carpets	Syosset	NY	USA
66	Stark Carpet Corp		New York	NY	USA
67	TaiPing Carpets Americas Inc.	Edward Field	Calhoun	GA	USA

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California Carpet Stewardship Plan 2017–2021

#	Parent Company	Sub Companies	City	State	Country
68	Tandus Flooring Inc.	Tandus Flooring US LLC, Desso BV, Desso (U.S.A.) Inc.	Dalton	GA	USA
69	The Dixie Group, Inc.	Dixie Home, Fabrica International, Masland Carpets and Rugs, Masland Contract, Whitespace, Atlas Carpet Mills	Mobile	AL	USA
70	The Miller Davis Group	Davis & Davis Rugs, Glen Eden Wool Carpets, Luzern LTD	Chattanooga	TN	USA
71	Totally Enterprises		Dalton	GA	USA
72	Ulster Carpet Mills (North America) Inc.		Marietta	GA	USA
73	Unique Carpets Ltd.		Riverside	CA	USA
74	Wellington		Fremont	CA	USA
75	WOOLSHIRE CARPET MILLS INC.		Calhoun	GA	USA

Attachment 5. California Carpet Recycling Drop-off Locations

California Carpet Stewardship Program

Carpet Recycling Drop-Off Locations / Lugares donde llevar alfombras para reciclar

Before you visit: Contact drop-off site to confirm participation, business hours, types of carpet accepted and identification required.

Antes de su visita: Comuníquese con el lugar donde llevaría las alfombras para confirmar que participan, el horario de atención al público, los tipos de alfombra que aceptan, así como la identificación que requieren.

<p>ALAMEDA COUNTY Fremont Recycling & Transfer 41149 Boyce Road Fremont, CA 94538 510-252-0500</p> <p>BUTTE COUNTY Recology Butte 2720 South 5th Avenue Oroville, CA 95965 530-533-5868</p> <p>CALAVERAS COUNTY Rock Creek Solid Waste Facility & Landfill 12021 Hunt Road Milton, CA 95684 209-754-6403</p> <p>DEL NORTE COUNTY Del Norte County Transfer Station 1700 State Street Crescent City, CA 95531 707-465-1100</p> <p>EL DORADO COUNTY El Dorado Disposal/Waste Connections 4100 Throwita Way, Placerville, CA 95667 530-295-2808</p> <p>HUMBOLDT COUNTY Hawthorne Street Transfer Station 1059 West Hawthorne Street Eureka, CA 95501 707-268-8680</p> <p>INYO COUNTY Bishop-Sunland Landfill 110 Sunland Indian Reservation Road Bishop CA 93514 760-872-4126</p> <p>LAKE COUNTY Lake County Waste Solutions 230 Soda Bay Road Lakeport, CA 95453 707-234-6412</p>	<p>LOS ANGELES COUNTY American Reclamation 4560 Dorian Street Los Angeles, CA 90039 818-552-4068</p> <p>Carpet Pad Conversion 1429 W. 130th Street Gardena, CA 90249 714-299-4206</p> <p>Carpet Solutions 17100 Margay Avenue Carson, CA 90746 310-886-3800</p> <p>LA Fiber 4920 S Boyle Avenue Vernon, CA 90058 323-277-0627</p> <p>MARIN COUNTY Marin Resource Recovery Center 565 Jacoby Street San Rafael, CA 94901 415-485-5646</p> <p>MARIPOSA COUNTY Mariposa Landfill, Composting and Recycling Center 5593 Highway 49 North Mariposa, CA 95338 209-966-5165</p> <p>MENDOCINO COUNTY Solid Waste Systems 3151 Taylor Drive Ukiah, CA 95482 707-234-6410</p> <p>MONO COUNTY Benton Crossing Landfill 899 Pit Road, Crowley Lake, CA 93546 (760) 937-2192</p> <p>MONTEREY COUNTY Salinas Valley Solid Waste Authority 139 Sun Street Salinas, CA 93901 831-775-3000</p>	<p>NAPA COUNTY Devlin Rd Transfer Station 889 Devlin Road American Canyon, CA 94503 707-258-9005</p> <p>Napa Recycling & Waste Services 820 Levittin Way American Canyon, CA 94503 707-256-3500</p> <p>ORANGE COUNTY Sunset Transfer Station 16122 Construction Circle Irvine, CA 92606 949-654-1562</p> <p>PLUMAS COUNTY Delleker Transfer Station 73980 Industrial Way Delleker, CA 96122 530-832-4879</p> <p>SACRAMENTO COUNTY Florin Perkins Public Disposal Site 4201 Florin Perkins Road, Sacramento, CA 95826 408-938-4958</p> <p>SAN DIEGO COUNTY A-1 Planet Recycling 1564 Jayken Way Chula Vista, CA 91911 619-424-7545</p> <p>SAN FRANCISCO COUNTY Recology San Francisco 501 Tunnel Avenue San Francisco, CA 94134 415-330-1400</p> <p>SAN JOAQUIN COUNTY Lovelace Transfer Station 2323 E. Lovelace Road Manteca, CA 95336 209-982-5770</p> <p>SANTA BARBARA COUNTY MarBorg Industries C&D Facility 119 N Quarantina St Santa Barbara, CA 93103 805-963-18522</p> <p>SANTA CLARA COUNTY Green Waste Recovery 625 Charles Street San Jose, CA 95112 408-938-4958</p> <p>GreenWaste Carpet Recycling 1201 North 15th Street San Jose, CA 95112 408-938-4958</p> <p>Zanker 675 Los Esteros Road San Jose, CA 95134 408-938-4958</p> <p>SANTA CRUZ COUNTY City of Santa Cruz Resource Recovery Facility 605 Dimeo Lane Santa Cruz, CA 95060 831-420-6270</p> <p>Ben Lomond Transfer Station 9835 Newell Creek Road Ben Lomond, CA 95005 831-336-3951</p> <p>Buena Vista Landfill - Santa Cruz County 1231 Buena Vista Drive Watsonville, CA 95076 831-454-5153</p> <p>SISKIYOU COUNTY Black Butte Transfer Station - Mount Shasta 3710 Springhill Drive Mt Shasta, CA 96067 530-926-1610</p> <p>SONOMA COUNTY Industrial Carting 3911 Santa Rosa Avenue Santa Rosa, CA 95407 707-585-0511</p> <p>SUTTER/YUBA COUNTIES Recology Sutter - Yuba 3001 Levee Road Marysville CA 95901 530-743-6933</p> <p>TEHAMA COUNTY Tehama County/Red Bluff Landfill 19995 Plymire Rd Red Bluff, CA 96080 530-528-1102</p> <p>TRINITY COUNTY The Floor Store (Retail store) 1306 Nugget Lane, Weaverville, CA 96093 209-532-1413</p> <p>TUOLUMNE COUNTY Cal Sierra Transfer Station 19309 Industrial Drive Sonora, CA 95370 209-532-1413</p>
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Attachment 6. Description of Subsidy Flow and Stacking

Participants may be eligible for one or more incentives and/or subsidies on a single pound of material, based on the particular activity or activities being performed. A few examples are provided below to illustrate how subsidies may be stacked as it moves through the system:

Carpet Tile Reuse or Broadloom Reuse

1. A collector/sorter who collects, sorts, ships and sells/donates sorted carpet tile or broadloom for reuse is not eligible to receive separate collection subsidies. They are eligible for the 10 cents reuse subsidy.
2. The collector/sorter (in some cases may also serve as a processor) who sells/donates sorted carpet tile or broadloom for reuse is also eligible to receive 10-cent reuse subsidy.

Total potential payout on Reuse pounds

= 0 cents + 10 cents

= 10 cents/pound

Carpet Tile Recycling

1. A collector/sorter who collects, sorts, ships and sells/donates sorted carpet tile for recycling is not eligible to receive collection subsidies.
2. The receiving processor (not the collector/sorter) of this material is then eligible to receive 10 cents on the finished tile recycled output yielded from carpet tile when it is shipped and sold to a manufacturer. (*generally anticipated to be 80-100% of whole carpet weight received*)
3. The receiving manufacturer (may be the same as the processor) is not currently eligible for subsidies.

Total potential payout on Tile Recycling pounds

= 0 cents + 10 cents + 0 cents

= 10 cents/pound

Non-Nylon (PET/PTT/PP) Broadloom – Collected/Sorted, Recycled, and Manufactured

1. A collector/sorter who collects, sorts, ships and sells sorted broadloom pounds for recycling is eligible to receive 2 cents/pound on that material regardless of fiber type.
2. The receiving processor of this material (in some cases a processor may also serve as a collector/sorter) is then eligible to receive another 10 cents on the finished Type 1 recycled output yielded from this material when it is shipped and sold to a manufacturer (*generally anticipated to be 30-40% of whole carpet weight received*).

3. The receiving non-nylon manufacturer is eligible to receive 25 cents/pound on the feedstock used in the product of their recycled products, once those products are shipped and sold. *(Paid out on input pounds of non-nylon PCC content sold, not final weight of the finished product).*

Total potential payout on Non-Nylon pounds

= 2 cents + 10 cents + 25 cents

= 37 cents/pound

Nylon (N6/N66) Broadloom – Collected/Sorted, Recycled, and Manufactured

1. A collector/sorter who collects, sorts, ships and sells sorted broadloom pounds for recycling is eligible to receive 2 cents/pound on that material.
2. The receiving processor of this material (in some cases a processor may also serve as a collector/sorter) is then eligible to receive another 10 cents on the finished Type 1 recycled output yielded from this material when it is shipped and sold to a manufacturer *(generally anticipated to be 30-40% of whole carpet weight received).*
3. The receiving nylon manufacturer is not currently eligible for subsidies.

Total potential payout on Nylon pounds

= 2 cents + 10 cents

= 12 cents/pound

Calcium Carbonate – Collected/Sorted, Recycled, and Manufactured

1. A collector/sorter who collects, sorts, ships and sells sorted broadloom pounds for recycling is eligible to receive 2 cents/pound on that material.
2. The receiving processor of this material (in some cases a processor may also serve as a collector/sorter) is then eligible to receive another 17 cents on the finished calcium carbonate recycled output yielded from this material when it is shipped and sold to a manufacturer *(generally anticipated to be 30-40% of whole carpet weight received).*
3. The receiving manufacturer is not currently eligible for subsidies.

Total potential payout on Calcium Carbonate pounds

= 2 cents + 17 cents

= 19 cents/pound

Type 2 Recycled Output (any fiber type) – Collected/Sorted, Recycled, and Manufactured

1. A collector/sorter who collects, sorts, ships and sells sorted broadloom pounds for recycling is eligible to receive 2 cents/pound on that material.

2. The receiving processor of this material (in some cases a processor may also serve as a collector/sorter) is then eligible to receive another 3 cents on the finished Type 2 recycled output yielded from this material when it is shipped and sold to a manufacturer (*generally anticipated to be 40-60% of whole carpet weight received*).
3. The receiving manufacturer is not currently eligible for subsidies.

Total potential payout on Type 2 pounds

= 2 cents + 3 cents

= 5 cents/pound

CAAF/Kiln Processing Waste – Collected/Sorted, Recycled, and Manufactured

1. A collector/sorter who collects, sorts, ships and sells sorted broadloom pounds for recycling is eligible to receive 2 cents/pound on that material.
2. The receiving processor of this material (in some cases a processor may also serve as a collector/sorter) is then eligible to receive another 3 cents on process waste material unable to be sold as recycled output, when it is shipped and sold to a facility for CAAF or Kiln use (*generally anticipated to be 1-20% of whole carpet weight received*).
3. The receiving CAAF or Kiln facility is not currently eligible for subsidies.

Total potential payout on CAAF/Kiln pounds

= 2 cents + 3 cents

= 5 cents/pound

Attachment 7. Monthly Reporting Forms

Collector/Sorter Monthly Input Form

1 CSE Data Entry Form		
2	Company Name:	
3	Report Prepared by:	
4	Phone Number:	
5	Email Address:	
6	Date of Report:	
7	AB 2398 Monthly Reporting CONFIDENTIAL	Actual
8		September
9		2016
10 California Jobs Information		
11	Number of CA FTE Employees at beginning of this month	
12	Number of FTE CA Jobs lost this month	
13	Number of FTE CA Jobs gained this month	
14	TOTAL Number of FTE CA Employees at end of this month	-
15 Accounting of Beginning Inventory this month		
16	Starting Inventory - Whole Carpet	
17	Starting Inventory - Carpet Tiles For REUSE or Recycling	
18	Starting Inventory - Pounds of carpet PAD/CUSHION	
19	TOTAL Starting Inventory	-
20 Accounting for total PC Carpet Inputs & Beginning Inventory this month		
21	Post-consumer carpet pounds directly collected by you from California for this month	-
22	Nylon 6	
23	Nylon 6,6	
24	Polypropylene	
25	PET	
26	Wool	
27	Other/Mixed Fibers	
28	Carpet Tile	
29 Carpet PADDING		
30	Pounds of carpet PAD/CUSHION collected by you	
31	TOTAL Carpet + Padding	-
32 Accounting for total PC Carpet Outputs & Ending Inventory		
33	CARPET TILE REUSE: Carpet Tile Shipped and Sold/Donated for Reuse	
34	Broadloom REUSE Whole Carpet Sold/Donated & Shipped for REUSE only	
35	Carpet tile shipped and sold for recycling	
36	Whole carpet shipped to US customers OUTSIDE California	
37	Whole carpet shipped to customers outside the United States	
38	Whole carpet shipped to customers INSIDE California	
39	Non-carpet materials with value (i.e. carpet cushion) - Shipped for Recycling	
40	Ending Inventory - Whole Carpet	
41	Ending Inventory - Carpet Tile	
42	Ending Inventory - Pounds of carpet PAD/CUSHION	
43	TOTAL	-
44	TOTAL Carpet	-
45 Output and other destinations of post-consumer carpet internally processed this month		
46	CAAF	
47	Cement Kiln feedstock	
48	Carcass Sold	
49	Landfilled	
50	WTE	
51	Incinerated	
52	TOTAL	-

Collector/Sorter Monthly Input Form (continued)

53	Mass Balance (should equal 0)	
54	Starting + Collections In - Collections Out - Other End Use	-
55	Calculations for funding	
56	CSE Reporting Incentive	\$ 1,000.00
57	Carpet Tile REUSE: Carpet Tile Shipped and Sold/Donated for Reuse (\$0.10)	\$ -
58	Broadloom REUSE Only (\$0.10)	\$ -
59	Whole Carpet Shipped and Sold for recycling (\$0.02)	\$ -
60	TOTAL Requested	\$ 1,000.00

STRICTLY CONFIDENTIAL SHIPMENT SALE/DONATION DETAIL FOR CARE/ACCOUNTING FIRM ONLY

63 LIST ALL PARTIES RECEIVING SOLD/DONATED CARPET TILE FOR REUSE (greater than or equal to 500 pounds)

64	Company/Individual Receiving Carpet Tiles for REUSE	# LBS Sold/Donated	Location/Contact Information for Receiving Party
65	[insert]	[# LBS]	[insert]
66	[insert]	[# LBS]	[insert]
67	[insert]	[# LBS]	[insert]
68	[insert]	[# LBS]	[insert]
69	[insert]	[# LBS]	[insert]

STRICTLY CONFIDENTIAL SHIPMENT SALE/DONATION DETAIL FOR CARE/ACCOUNTING FIRM ONLY

72 LIST ALL PARTIES RECEIVING SOLD/DONATED BROADLOOM FOR REUSE (greater than or equal to 500 pounds)

73	Company/Individual Receiving Broadloom for REUSE	# LBS Sold/Donated	Location/Contact Information for Receiving Party
74	[insert]	[# LBS]	[insert]
75	[insert]	[# LBS]	[insert]
76	[insert]	[# LBS]	[insert]
77	[insert]	[# LBS]	[insert]
78	[insert]	[# LBS]	[insert]

STRICTLY CONFIDENTIAL SHIPMENT SALE/DONATION DETAIL FOR CARE/ACCOUNTING FIRM ONLY

81 LIST ALL PARTIES RECEIVING SOLD/SHIPPED WHOLE CARPET (greater than or equal to 500 pounds)

82	Company/Individual Receiving Whole Carpet	# LBS Sold/Shipped	Location/Contact Information for Receiving Party
83	[insert]	[# LBS]	[insert]
84	[insert]	[# LBS]	[insert]
85	[insert]	[# LBS]	[insert]
86	[insert]	[# LBS]	[insert]
87	[insert]	[# LBS]	[insert]

Submission of this data reaffirms my agreement to maintain good standing with CARE: I attest to the truthfulness of this data, I will allow review by CARE and its accounting representatives for verification, and I acknowledge I am not in violation of any local or state environmental regulations.

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Date Filed:	
Signoff:	



Processor Monthly Input Form

Processors Data Entry Form		
2	Company Name:	
3	Report Prepared by:	
4	Phone Number:	
5	Email Address:	
6	Date of Report:	
7	AB 2398 Monthly Reporting CONFIDENTIAL	Actual
8		September
9		2016
California Jobs Information		
11	Number of CA FTE Employees at beginning of this month	
12	Number of FTE CA Jobs lost this month	
13	Number of FTE CA Jobs gained this month	
14	Total Number of FTE CA Employees at end of this month	-
Post consumer carpet pounds directly collected or received by you for this month		
16	Post-consumer carpet pounds directly collected by you from California for this month	
17	Whole carpet from CA received from other collectors	
18	Total CA lbs.	-
19	Post-consumer carpet pounds directly collected by you from OUTSIDE California for this month	
20	TOTAL Post-consumer carpet pounds	-
Carpet PADDING		
22	Pounds of carpet PAD/CUSHION collected in CA by you	-
Carpet POUNDS directly collected by YOU from California by FIBER type [Do NOT report pounds you are purchasing from other collectors]		
24	Nylon 6	
25	Nylon 6,6	
26	Polypropylene	
27	PET	
28	Wool	
29	Other/Mixed Fibers	
30	TOTAL	-
31	<i>CHECK: Row 30 must equal Row 16</i>	-
Accounting for total PC Carpet Inputs & Beginning Inventory this month		
33	Beginning Inventory of Whole Carpet from CA at start of month (should equal prior month ending inventory)	
34	Whole Carpet Collected from California (equal to Total CA lbs. Row 18)	-
35	TOTAL CA CARPET AVAILABLE FOR PROCESSING	-
Accounting for total Whole Carpet Outputs & Ending Inventory		
37	Tile REUSE Carpet TILE Sold/Donated & Shipped for REUSE only	
38	Broadloom REUSE Whole Carpet Sold/Donated & Shipped for REUSE only	
39	COLLECTED and Internally Used BY YOU Whole Carpet this month from CA only	
40	RECEIVED from other collectors / sorters and Internally Used BY YOU Whole Carpet this month from CA only	
41	Whole Carpet shipped to US customers OUTSIDE California	
42	Whole Carpet shipped to customers outside the United States	
43	Whole Carpet shipped to customers INSIDE California	
44	Whole Carpet sent to WTE	
45	Whole Carpet sent to Incineration	
46	Whole Carpet sent to Landfill	
47	Ending Inventory of Whole Carpet	
48	TOTAL	-
49	<i>CHECK: Row 48 must equal Row 35</i>	-

Processor Monthly Input Form (continued)

50	Processing of Internally Used Whole Carpet	
51	Internally Used Whole Carpet from CA only (Rows 39 and 40)	-
52	All Processed Outputs (Type 1, Type 2, Calcium Carbonate, CAAF, and Cement Kiln)	
53	Processed Wastes sent to Landfill	
54	Processed Wastes sent to WTE	
55	Other Outlets	
56	Processed Wastes sent to Incineration	
57	TOTAL	-
58	<i>CHECK: Row 57 must equal Row 51</i>	-
59	Output and other destinations of post consumer carpet internally processed this month	
60	Beginning Inventory of Type 1 Outputs from prior month	
61	Processed Type 1 Output generated this month (Row 52-79-81-85)	-
62	TOTAL TYPE 1 MATERIAL PROCESSED	-
63	REUSE	
64	Tile REUSE Carpet Tile Sold & Shipped for REUSE only (Row 37)	-
65	Broadloom REUSE Whole Carpet Sold/Donated & Shipped for REUSE only (Row 38)	-
66	Type 1 Outputs (Sold and Shipped)	
67	TILE RECYCLED: Shredded Carpet tile used for tile backing	
68	Fiber	
69	DePoly or Chemical Component	
70	Total Type 1 Output (SOLD & SHIPPED)	-
71	Ending Inventory of Type 1 Outputs	
72	<i>CHECK: Rows 60+61-67-68-69-71 must equal zero</i>	-
73	Ash Tests	
74	Number of Ash Tests run this month (min 1 per 1M pounds)	
75	Average Ash Test Results over month for Type 1 pounds	
76	Type 2 Outputs (Sold & Shipped)	
77	Filler	
78	Carcass Sold	
79	Total Type 2 Output (SOLD & SHIPPED) as Counted by CalRecycle	-
80	Calcium Carbonate	
81	Pounds of Calcium Carbonate sold & shipped as a RAW MATERIAL	
82	Other Diversion	
83	CAAF	
84	Cement Kiln feedstock	
85	Total Other Diversion	-
86	TOTALS	
87	Total Ending Inventory of All Processed Output (Type 1, Type 2, Calcium Carbonate, and Other)	
88	TOTAL Recycled Output As Counted by CalRecycle (lbs)	-
89	Calculations for funding	
90	Whole Carpet collected by you Shipped/Sold for recycling (\$0.02)	\$ -
91	Tile REUSE Only (\$0.10)	\$ -
92	Broadloom REUSE Only (\$0.10)	\$ -
93	Tile RECYCLED: Shredded Carpet tile used for tile backing (\$0.10)	\$ -
94	Fiber and DePoly Type 1 Output (\$0.10)	\$ -
95	Type 2 Output (excluded CAAF and Kiln) (\$0.03)	\$ -
96	Calcium Carbonate as Raw Material (\$0.17)	\$ -
97	CAAF (Separate Payment Calculation) (\$0.03)	\$ -
98	Cement Kiln feedstock (Separate Payment Calculation) (\$0.03)	\$ -
99	Total Requested \$s (Tile Reuse + Tile Recycle + Type 1 + Type 2 + CC + Other Diversion)	\$ -
100	ATTESTATION	
101	Have you submitted the attestation form?	

Processor Monthly Input Form (continued)

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Manufacturer Monthly Input Form

1	Manufacturers Data Entry Form	
2	Company Name:	
3	Report Prepared by:	
4	Phone Number:	
5	Email Address:	
6	Date of Report:	
7	AB 2398 Monthly Reporting & Forecast CONFIDENTIAL	Actual
8		September
9		2016
10	If located in CA, number of Full Time Equivalent (FTE) Employees working on PCC Products	
11	Number of CA FTE Employees at beginning of this month	
12	Number of FTE CA Jobs lost this month	
13	Number of FTE CA Jobs gained this month	
14	Total Number of FTE CA Employees at end of this month	-
15	Type 1, Non-Nylon PC Carpet pounds purchased by you in this month	
16	Type 1 pounds directly purchased by you from a QUALIFIED Processor of CA Waste Carpet each month	
17	Type 1, Non-Nylon Processed CA PC Carpet pounds directly purchased by YOU by FIBER type	
18	Polypropylene	
19	PET	
20	Other including mixed non-nylon fibers	
21	TOTAL	-
22	<i>CHECK: Row 21 must equal Row 16</i>	
23	Accounting for total processed Type 1 PC Carpet Inputs & Beginning Inventory this month	
24	Beginning Inventory of Type 1 Non-Nylon processed PC Carpet from CA at start of month (should equal prior month ending inventory)	
25	Type 1 Non-Nylon Processed PC Carpet received/purchased (Row 16)	-
26	TOTAL Material Available for Current Month	-
27	Accounting for total PC Carpet Outputs & Ending Inventory	
28	Type 1 Non-Nylon Processed PC Carpet SOLD & SHIPPED this month <i>[SEE NOTE 1]</i>	
29	Type 1 Non-Nylon (waste) sent to WTE	
30	Type 1 Non-Nylon (waste) sent to Landfill	
31	Type 1 Non-Nylon (waste) sent to Incineration	
32	Ending Inventory of Type 1 Non-Nylon processed PC Carpet from CA	
33	TOTAL	-
34	<i>CHECK: Row 33 must equal Row 26</i>	
35	Calculations for funding	
36	Total Requested (\$) Non-Nylon (\$0.25)	\$ -
37	Output and other destinations of Non-Nylon Type 1 materials internally processed this month	
38	Non-Nylon Products SOLD & SHIPPED in month	# LBS Sold/Shipped
39	Name of End Product (Specify Product)	[# LBS]
40	Name of End Product (Specify Product)	[# LBS]
41	Name of End Product (Specify Product)	[# LBS]
42	Name of End Product (Specify Product)	[# LBS]
43	Name of End Product (Specify Product)	[# LBS]
44	<i>CHECK: Rows 39+40+41+42+43 must equal Row 28</i>	


Manufacturer Monthly Input Form (continued)

45	Source of Type 1, Non-Nylon Processed CA PC Carpet pounds directly purchased by YOU		
46	PLEASE LIST ALL SOURCES OF FIBER PURCHASES BY COMPANY	# LBS Purchased	Location/Contact Information for Purchasing Party
47	[insert]	[# LBS]	[insert]
48	[insert]	[# LBS]	[insert]
49	[insert]	[# LBS]	[insert]
50	[insert]	[# LBS]	[insert]
51	[insert]	[# LBS]	[insert]
52	ATTESTATION		
53	Have you submitted the attestation form?		

Submission of this data reaffirms my agreement to maintain good standing with CARE: I attest to the truthfulness of this data, I will allow on-site review by CARE and its accounting representatives for verification, and I acknowledge I am not in violation of any local or state environmental regulations.

NOTE 1: This is pounds of Type 1 PCC contained in your final product. It is NOT the total product weight; only that of the Type 1 content.

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Signoff:	



CARPET AMERICA RECOVERY EFFORT
Developing market-based solutions for the recycling and reuse of post-consumer carpet

Attachment 8. Education and Outreach Materials

Monthly E-News

California Carpet Stewardship Program
[August 2016 Update](#)



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

September 30 Deadline to Apply for 1C Procurement Grants

California public entities and their contractors are encouraged to apply for grants of up to \$50,000 per project to support the procurement of post-consumer recycled carpet products. The deadline to apply is September 30; full details and application form can be found [here](#).

Questions on the pilot grant cycle were taken from the public, with answers published on August 1 [here](#).

A list of pre-qualified eligible products containing California post-consumer carpet material is available [here](#).

Double Green Products Debut

CARE's California Carpet Stewardship Program has unveiled a new designation for post-consumer recycled-carpet products. Double Green products contain California post-consumer carpet material and at least one other recycled material, both diverted from California landfills. One newly-created product comes from Modesto's Sierra Mat & Rubber, which produces wheel stops and floor mats made with recycled-tire crumb rubber mixed with post-consumer calcium carbonate from recycled carpet.



Program Blog



Developing Market Based Solutions for the Recycling & Reuse of Post-Consumer Carpet

search GO

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Products with Recycled Post-Consumer Carpet Available from California Companies

Posted on September 14, 2016



A variety of products using recycled California post-consumer carpet as feedstock are now available from four in-state companies: **EcoStrate** (signage), **Reliance Carpet Cushion**, **SafePath** (ramps, walkway systems) and **Sierra Mat & Rubber** (wheel stops, pavers, mats.)

These companies are listed on key databases maintained by CalRecycle to encourage the acquisition of products containing recycled-material content:

The **Recycled-Content Product Manufacturers (RCPM)** directory showcases innovative recycled-content products made by California manufacturers who use recycled waste as a feedstock.

Recycle Store lists manufacturers who use California waste as a feedstock, and are located within a Recycling Market Development Zone (RMDZ).

CARE offers grants to support the procurement of post-consumer carpet products by California public entities and their contractors. The deadline to apply is September 30 – learn more [here](#).

Archives

- September 2016
- August 2016
- June 2016
- May 2016
- April 2016
- March 2016
- February 2016
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- October 2015
- August 2015
- July 2015
- May 2015
- April 2015
- March 2015
- February 2015
- January 2015
- December 2014
- November 2014

Program Brochure



Rural County Signage

**Carpet
& Pad
Recycling
Here**

**Must be dry
and debris-free**



Monthly E-News for Recycling Coordinators

California Carpet Stewardship Program
Local Government Recycling Coordinators News



California Carpet Stewardship Program

An initiative of CARE: Carpet America Recovery Effort

The California Carpet Stewardship Program is reaching out to local government recycling coordinators to spread the word about **carpet recycling resources and opportunities**. We will provide you with information in the coming months to enable you to communicate with transfer stations, retailers and the public with a goal of increasing carpet recycling in your area. Currently available resources are described below and include information about our California map of carpet recycling drop-off sites and a brochure suitable for the public.

Carpet Recycling Drop-Off Site Map

CARE provides services to dozens of drop-off locations throughout the state of California that accept carpet for recycling; these are noted on an [updated online map](#). Independent drop-off locations not affiliated with CARE's California Carpet Stewardship Program are also listed. Opening hours, contact information, and information about fees are included in each listing.

Note: It is important to contact the drop-off site before visiting. Some locations may require an appointment and/or proof of residency.

We encourage you to publicize the [drop-off site map](#) as appropriate on your agency's website and via social media. The number of CARE-supported sites is expected to double in

California Carpet Stewardship Program
Carpet Recycling Drop-Off Locations



Legend:
● CARE Drop-off location
● Independent Drop-off location

California Carpet Stewardship Program
www.carpetrecycling.org
CarpetRecovery.org/CA

Carpet America Recovery Effort (CARE) is a leading source of drop-off locations throughout the state of California that accept carpet for recycling. We listed on this map independent drop-off locations not affiliated with CARE's California Carpet Stewardship Program. CARE is continuously working to add more drop-off sites. For the latest on this listing please visit our website www.carpetrecycling.org.

For more information and contact information:

Program Twitter Feed

 **CARE**
@CarpetRecycle

Post consumer **#carpet** product procurement grants available and more news: bit.ly/29FFFZG
#recycling



Carpet Recycling in California

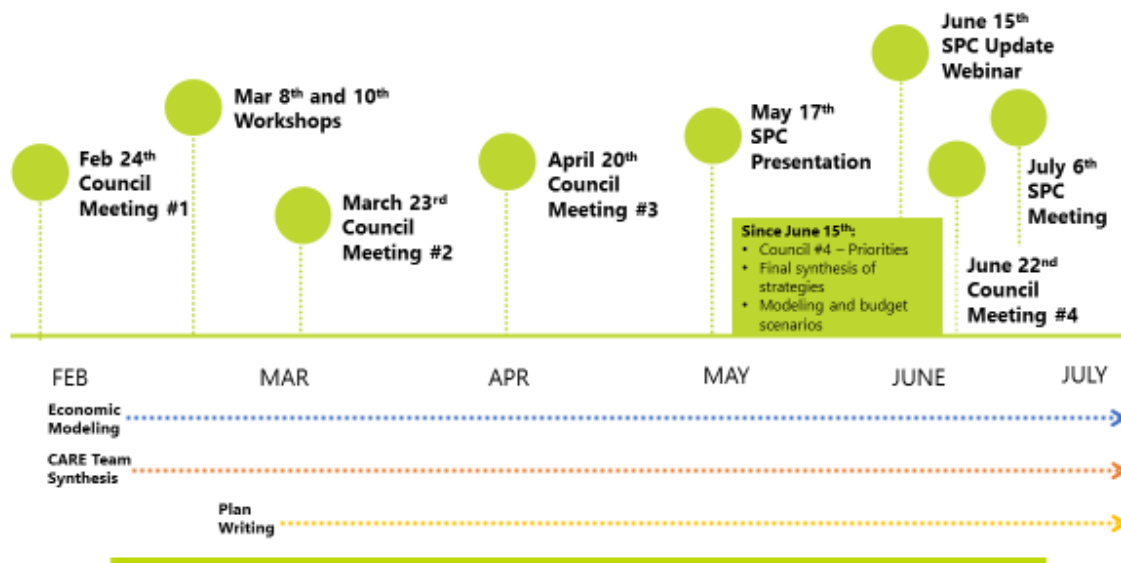
RETWEET **1** LIKES **3**

3:38 PM - 14 Jul 2016

Attachment 9. SPC Review Slides on Council Ideas



Update on Process



Overview



1. Review context, trends and projections
2. Present final synthesis of the Plan Strategies (Pillars)
3. Review Council input and priorities from meeting #4
4. Make decisions on funding scenarios for each Pillar
5. Identify areas of alignment:
 - *in, out, more research needed*
6. Identify budget/ranges for final analysis
7. Identify next steps to finalize Plan

Strategies

Subsidies

Grants

Tech Assist

R&D

Services

Systems

What are we doing here?



1. **Working to increase:**
 - Recyclability
 - Reuse
 - Collection
 - Recycling (Recycled Output)
 - Diversion
 - Market Development (Recycled Carpet Content Products)
2. **Meet statutory and regulatory goals**
3. **Maintain control over the program**
4. **Maintain a robust and resilient carpet industry**

Subsidies

Grants

Tech Assist

R&D

Services

Systems

Order of Magnitude Difference



1. CalRecycle Regulatory Lens
2. Input of Stakeholders
3. Potential Competitive Plans

- Integrate input of the Council
- Continue current program offerings
- Incorporate new service offerings
- Increase total program budget
- Include controls and flexibility

- Subsidies
- Grants
- Tech Assist
- R&D
- Services
- Systems

Developing a Self-Sustaining Market



Market-Based Solutions

1. Current carpet recycling ecosystem is not self-sustaining
2. We are representing 2 industries: Carpet & Recycling
3. Need targeted investment in each goal category
4. Catalyze and accelerate development in short-term
5. Reduce incentives and support over long-term
6. Long-term is beyond this 5 year plan
7. Avoid long-term forever increasing investments

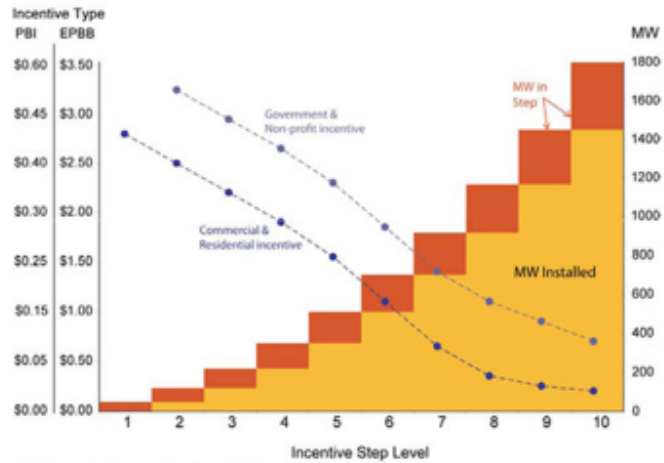
- Subsidies
- Grants
- Tech Assist
- R&D
- Services
- Systems

Declining Incentives Over Time



California Solar Initiative Rebates

- The rebates automatically decline in "steps" based on the volume of solar megawatts (MWs) with confirmed project reservations within each utility service territory.
- The figure shows the expected schedule for rebate decline over time (10 years).



PBI: Performance Based Incentive, paid over 5 years, in \$ / kWh
 EPBB: Expected Performance Based Buydown, paid-upfront, in \$ / W

Source: <http://www.gosolarcalifornia.ca.gov/csi/rebates.php>

Goals & Requirements



Statutory Goals

1. **Recyclability**
2. **Reuse**
3. **Collection**
4. **Recycled Output**
5. **Diversion**
6. **Market (Product) Development**

Must demonstrate continuous, meaningful improvement

Program Requirements

Statutory:

7. Sufficient Funding Mechanism to Carry Out
8. Include Education & Outreach
9. Consult Stakeholders
10. Manage All Polymer Types

Regulatory:

11. Reasonably Convenient Collection
12. Estimate Changes in Market Conditions
13. Anticipate CA Recycling Infrastructure

CARE Priorities:

14. *Functional & Efficient System*
15. *Maintain Robust & Resilient Carpet Industry*

Recyclability (part 1)



- | | |
|--|---|
| <p>1. Fundamental R&D to improve recyclability (open to mills, Tier 2, universities)</p> <p>a. Sustainability Study (closed-loop, biomimicry, cradle-to-cradle, green chemistry)</p> <p>b. Innovation Design Consultant to identify opportunities</p> <p>c. Innovation Design Grants or Competitions ↑ recyclability, ↑ source reduction, ↑ recycled content</p> | <p>R&D</p> <p>Tech Assist</p> <p>Grants</p> |
| <p>2. Promote carpet recycled content and recyclable products</p> | <p>E&O</p> |

9

Recyclability (part 1)



- | | |
|---|------------------|
| <p>1. Pull-through subsidy adjustments (become own best customer):</p> <p>a. New Tier 2 <u>nylon</u> subsidies to drive nylon recycled product development</p> <p>b. Higher Tier 2 subsidy for <u>carpet-to-carpet</u>, upcycled/closed-loop products using RO</p> <p>c. Higher Tier 2 subsidy for products that offer a <u>take-back program</u> (or require)</p> <p>d. Higher Tier 1 subsidy for <u>higher recyclability</u> (e.g. tile) – readily recyclable but low capture rate</p> | <p>Subsidies</p> |
|---|------------------|

10

Reuse (part 1)



- | | |
|--|---|
| <p>1. Micro grants (\$2-5k) to establish reuse programs –combine with collection micro-grants program</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">Grants</div> |
| <p>2. Expand \$0.10/lb reuse subsidy eligibility to processors & CSEs plus reuse centers, disposal sites, demo, etc.</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">Subsidy</div> |
| <p>3. Technical assistance to reuse centers, nonprofits, contractors & installers to establish reuse programs</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">Tech Assist
or Systems</div> |
| <p>4. Reuse R&D study barriers, sanitation, messaging market research</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">R&D</div> |
| <p>5. Cooperative purchase/sales mechanisms to increase reuse (e.g., web portals, broker, etc.) –combine with RO brokering assistance</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">E&O</div> |

11

Collection (part 1)



- | | |
|--|--|
| <p>1. Increase number of collection sites (drop-off and retailers):</p> | |
| <p>a. Public drop-off collection service and technical assistance (paid storage, transport, tipping fees, education, dispatch, customer support)</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">Systems</div>
<div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">Tech Assist</div> |
| <p>b. Retailer technical assistance to support new collection service – assumes service at or below landfill \$; interdependent with #2a</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">Tech Assist</div> |
| <p>2. Leverage existing solid waste and recycling network:</p> | |
| <p>a. Continue & expand CSE subsidies (\$0.02/lb) to demo, disposal sites, haulers, reuse centers, etc.</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">Subsidy</div> |
| <p>b. Collection micro grants (\$10-25k) for CSEs, processors, haulers, disposal sites, agencies, reuse centers, etc. (e.g., small equipment, containers, education, micro-phazers, etc.)</p> | <div style="background-color: #4CAF50; color: white; padding: 5px; border-radius: 5px; display: inline-block;">Grant</div> |

12

Collection (part 2)



3. **Capital grants** open to CSEs for large equipment and infrastructure Grants
4. Increase **staffing/outreach to expand E&O** delivery to target audiences E&O
Systems
 - a. Increase **outreach to installers and contractors**
 - b. **Operations** logistics and **customer service** support
 - c. Build **partnerships with other stewardship** programs
5. Conduct feasibility study to define “**reasonably convenient collection**” to guide collection and control costs in years 3-5 R&D

13

Recycling (part 1)



1. Set subsidies to **offset virgin vs. recycled feedstock** cost: Subsidies
 - a. Link selected **subsidy payouts to market** indices
 - b. Create **differential polymer subsidy** amounts tied to market indices
 - c. Maintain **economic model to adjust subsidies** based on market conditions
2. Offer increased subsidy to **priority areas:** Subsidies
 - a. **CA Businesses** (reward material handled in CA)
 - b. **Carpet Tile vs. Broadloom** (reward higher recyclability)
 - c. **Commercial Broadloom** (difficult to recycle, longer processing time)
 - d. **Recycled Output quality** for secondary products (adjust Type1 & 2 Ash Content thresholds)

14

Recycling (part 2)



- 3. **Innovation Grants** for increased recycled output yield/efficiency Grants
- 4. Continue and increase **Capital Grants** expand **in-state capacity & throughput**; reduce reliance on out-of-state processors & manufacturers Grants
- 5. Continue and increase **Technology and Product Testing Grants** improve quantity or quality of recycled output Grants
- 6. Increase **CA staffing** levels Systems

15

Market Development (part 1)



- 1. **Offset virgin vs. recycled** prices; link to market indices Subsidies
- 2. **Innovation grant for expanded new product** development Grants
- 3. **Research and develop** new program component to drive recycled carpet content and recyclable product availability and procurement R&D
- 4. Continue **capital, testing, procurement grants**; raise annual allocation and maximum awards Grants

16

Market Development (part 2)



5. Offer **Tier 2 product subsidies** to increase use of carpet RO in recycled products:
 - a. Continue Tier 2 Non-Nylon subsidy & growth
 - b. Add **Tier 2 Nylon** subsidy (& growth)
 - c. Add **Tier 2 Intermediate** products (differentiate pellets vs. finished products with lower payout)
 - d. Add **Tier 2 Specialized** subsidies - **Tile, CaCO₃** (split Tier 1 and 2), etc.
 - e. **Priority subsidy** (extras \$XX cents/lb) - carpet-to-carpet, upcycling/closed-loop, take back, CA, etc.
 - f. **Surge subsidy** – accelerate uptake of new products or technologies

Subsidies

17

Market Development (part 3)



6. Increase **staffing for market development** (e.g., technical, commodities broker) –*combine with reuse broker*
7. Offer **grants for mills and manufacturing** (↑ carpet-to-carpet, ↑ nylon recycling, ↑ recyclability/upcycling, ↑ CaCO₃ use)
8. Promote **SABRC, procurement and adoption of EPP policies** for local governments and businesses
9. **Leverage mills and manufacturing sales reps** to educate retailers to educate consumers
10. Collaborate with **GoBiz, RMDZ, DGS, CalRecycle** to leverage resources, grants and support for CA facilities
11. Develop consumer facing **recycled products web portal**

Tech Assist
or Systems

Grants

Tech Assist
or Systems

E&O

Tech Assist
or Systems

E&O

18

Diversion (part 1)



1. **All Subsidies** for Reuse, Collection, RO, Tier 2, CAAF, Kiln Subsidies
2. **Innovation grants/awards** (e.g. create competition between mills, encourage collaboration between participant groups) Grants
3. Help **manage inventory**, maintain consistent volume **flow in down markets** Systems
 - a. **Communities broker** for recycled output; Facilitate diversion of non-recyclable components to export, Kiln/CAAF, or WTE within limits (Cap) as last resort (maybe with sunset clause)
 - b. Develop **strategic distributed storage** network (**require storage management plans** for all participants; prevent high inventories, avoid landfilling of valuable materials, store until market rebounds, set clear limits and protocols)

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Diversion (part 2)



6. Conduct **waste characterization and market study** on PCC material stream to identify all components, % of each, recycling/composting opportunities; use results to allocate resources or incentives R&D
7. Add **Tier 2 nylon subsidy** for secondary products to create pull-through (mimic success of non-nylon Tier 2) Subsidy
8. Offer **differential ↑ subsidies for hardest-to-recycle** materials (e.g., commercial carpet, CaCo3, natural fibers, etc.) Subsidy
9. Hire economic **analyst to identify economic indices** and system so that factors can be adjusted over time Tech Assist or Systems
10. Targeted outreach to **C&D facilities and contractors/installers** increase/enforce separation, material preparation, and encourage reduced tipping fees E&O

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