

Diversion and Recycling Outlook

Table 4 on the next page lists some of the key barriers impeding expansion of the waste tire recycling market segments. Current CalRecycle programs aim to help the industry overcome these barriers through a variety of funding, research, technical assistance, outreach, and direct business assistance activities.

Drawing on specific information gleaned during research for this report, Table 5 summarizes projections for short- and long-term recycling and diversion of California waste tires. In the short term, given projected increases in crumb rubber, use of TDA in civil engineering applications, and exports, with other diversion and recycling market segments expected to be stable, there is a strong potential for both diversion and recycling rates to increase moderately.

In the long term, given the diversity of diversion markets and their proven ability to sustain large volumes, it appears likely that diversion levels will continue to be high, in the 80 to 90 percent range, with occasional spikes above 90 percent and dips as markets grow and contract (especially export, ADC, and civil engineering, which can potentially increase or decrease significantly year to year). The potential for substantial, long-term growth in recycling volumes appears to rest mainly on whether large increases in customer demand for products made with crumb rubber and for TDA can occur and be sustained. There are some supply-related barriers to address (e.g., the need for a California producer of fine-mesh crumb rubber and demonstration models for job site logistics involving receipt of very large TDA quantities). However, production capacity for most non-fine-mesh crumb rubber and TDA currently exceed demand, and sustained strong demand would greatly reduce supply-side barriers.

Given these barriers and the overriding need for increased demand, a 75 percent tire recycling rate, as sought by CalRecycle, will be extremely challenging to achieve. To illustrate, Table 6 presents one hypothetical scenario that could result in a 75 percent tire recycling rate. Based on the estimated 2015 flows presented in this report, an additional 17 million PTEs would need to be recycled to achieve a 75 percent recycling rate. The scenarios presented in Table 6 would yield 16.4 million PTEs, very close to the target. However, as detailed in the table, achieving this level of growth for some market segments would require unprecedented increases in demand and production far beyond what past experience has indicated may be possible. It may be possible that some segments can exceed these growth levels, but again, this would depend on innovations and market conditions that have yet to be seen. The highest potential for substantial growth in demand would appear to be the paving market segment, since specific high-potential Caltrans policies are currently being investigated that could be implemented as soon as 2018.

That said, there is certainly room for growth in all of these recycling markets, with much riding on the manner in which California tire market development programs evolve in coming years, as described in the following section of this report.