Change is needed in the scrap tire recycling industry.

In all too many cases, tire-derived material is viewed as a “waste-derived” material, or simply a waste. End users often believe they are doing society a favor by taking this material off the hands of the processor. In many cases, they believe they should be paid to accept and use this stuff, if not by the processor then by the state. This attitude ignores the costs associated with bringing tire-derived materials to market, as well as the cost savings or performance enhancements that can be derived by using tire-derived material. For the scrap tire industry to thrive, this underlying attitude must change.

To realize this change, we need to work to ensure all interested parties — processors, retailers, end users, state officials and the general public — better understand the industry and its products. We must work to develop an understanding that scrap tires are not like any other secondary material, and that the policies and programs for other recycling efforts do not apply here. Our efforts need to demonstrate the benefits of using scrap tires, as well as the limitations and economic realities.

In Arizona, California, Florida and Texas, highway engineers have discovered that adding ground rubber to certain asphalt blends improves road durability and reduces maintenance costs of the asphalt in both hot and cold climates. In the Southeast, not only has the use of tire shreds as a drainage medium for septic fields become accepted, but it also has become the material of choice. Combustion facilities long have recognized tire-derived fuel (TDF) as an effective means to reduce critical criteria pollutants, to improve ash handling, and to help offset the high price of energy. They accept scrap tires as a commodity and willingly pay a fair market price for it.

The market reality is that a tremendous amount of competition exists for the same applications. Tire-derived fuel competes against petroleum coke, natural gas and inexpensive coals. To gain acceptance and market share, pricing, ease of transition and service become focal points. Price-conscious buyers can be an imposing barrier. Too often, the combination of modifications needed to use TDF, the misperceptions of tires as waste and inconsistent service by TDF suppliers allows potential end users to wait out the situation until they get their price.

Tire shreds used in civil engineering applications must compete against a number of materials, some cost competitive. Also, there are institutional impediments, such as state officials unwilling to allow use of scrap tire materials until they conclude intensive testing of the leachate and potential health impacts. This would be important research, if those studies had not already been done by a dozen states and prove the point.

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Ground rubber also faces many challenges. On one side, some economic interests fear that the addition of ground rubber to asphalt will make the pavement last too long and require too little maintenance and repair. On another side, over-production of ground rubber affects prices and business plans. Still another issue is to understand better where and how ground rubber can be added to other polymer materials (plastics and non-tire rubber) to obtain the long-sought-after results of improved performance or cost savings.

Looking at the bottom line
Tire-derived materials can be profitable to the businesses that produce the material and that use it. A number of processors consistently make a quality product and a profit as well. What many newcomers overlook is that this is the end result of many years of very hard work, dedication and a sound understanding of their markets, their management, the regulatory requirements and the product they produce.

Now, let’s consider basic economics. Too much of the marketplace consists of participants who rarely, if ever, make a profit on any of the products they produce and distribute, even with the tip fees they receive. It is common to find ground rubber producers selling product at less than the cost of production in an attempt to gain market share. What they fail to realize is that what they do today, someone else may do to them tomorrow. Still another large group of operators are only marginally profitable and operate only on a year-to-year basis. But the economics are not impossible, because some of the most profitable operators are simply shredding and landfilling tires, even though they must pay for the disposal.

At the Scrap Tire Management Council (Washington), we know that the scrap tire industry can operate in an economically viable manner, if it is willing to adhere to several basic business principles that are important for success.

First, our analysis of the market reveals that the successful processors understand their costs. Second, they work hard to develop sound markets. Third, most of these processors are in states that limit the landfilling of tires. Fourth, these operators are in states that effectively regulate the collection and transportation of tires to eliminate illegal haulers. Fifth, these processors are in states that have focused effort both on market development and stockpile abatement. Finally, the vast majority of these states do not subsidize the processing or end use of scrap tires. Although some states do, it is known that these programs will remain successful only as long as the subsidy remains in place.

Success in dealing with scrap tires is often a matter of public policy. For example, if a state seeks only the least costly disposal option, then scrap tires are landfilled. If a state take a hands-off approach, then dumping, stockpiling and weak markets are common. When states take an aggressive approach towards enforcement, market development and stockpile abatement, then the scrap tire industry typically does well.

Want, not waste
The problems and solutions to the scrap tire issue are as complex as the tire itself. In order to move this industry forward, states must understand that their policies have a profound impact on the viability of successful markets. Industry must run these enterprises as a professional, legitimate business. And, finally, we must work to ensure that the marketplace understands the value of tire-derived materials by treating these materials as a commodity or raw material, not as a waste.

We have seen the successful combination of public policy and private enterprise creating viable and sustainable markets for scrap tires. Now that we know what works and what has not, our goal — and our challenge — is to recreate these conditions in all regions of the country.

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