

# Eco-Materials and Sustainability

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Sustainability is on everyone's mind these days both at home and in the office. Companies large and small are making efforts in conservation working toward the triple bottom line of People, Planet and Profit. What about making sustainability a part of your company's vision? Create an ongoing process for getting each part of the company to recognize and understand its environmental, economic and social impacts. Each department should be thinking about how they can use that knowledge to innovate through a systematic and integrated approach to all daily tasks.

Entering into partnerships with customers and suppliers who share the same ideals with all three aspects of the bottom line in mind can give you a competitive advantage. In every place from the purchasing department to the material specifiers, an impact can be made. Purchasing recycled paper for the office is a simple step. However, a paperless office is a whole new concept and takes a little more effort, but the gains are greater.

The same applies to using materials for production purposes. Identifying and specifying an eco-material may be a little more challenging. Educating your customers regarding both new and existing materials with a low environmental impact can be a major differentiator for you in the years to come. Your customers (or their customers) will require "green", "eco-friendly", and sustainable benefits in the products they use in the near future.

Gasket fabricators are used as a resource for many industries and have direct influence in many circumstances for material choices and design criteria for OEM's. With the rising cost of petroleum-based materials and the trend toward green manufacturing, support of organic materials is growing due to the lower costs to recycle, recover or reprocess. Low material VOC (volatile organic compound) emissions at both the fabrication and manufacturing levels are also being recognized as a simple contributor to a healthy workplace.

As an example, cork and cork rubber materials can contribute in a variety of ways to a "green objective". Cork has a very low specific gravity and is a lightweight component with enough compressibility in 1 square inch to support 14,000 lbs. of pressure and can recover to at least 90% of its original thickness. Used in rolling stock (auto, truck, bus, etc.) applications, the lightweight factor is a key to improved fuel economy and CO2 emission reduction. The combination of cork and rubber are naturally excellent for anti-vibration and acoustic control (NVH). The rubber component adds to cork's inherent ability to resist the penetration of liquids. The organic cellular structure is excellent in friction applications and retains the friction properties even when in contact with oils or water. Benefits of sustainable materials, such as cork, exist all around us and are being refined for a variety of bio-technologies.

The bottom line is simple. A proactive approach to new trends and updated requirements can lead you toward dynamic new directions. Eco-based materials are now a real part of a new industrial revolution and recognition can easily be gained by being known as an innovator in your industry. The work involved in being an educated partner to both your customers and suppliers can be rewarding in all aspects of your future initiatives, giving you the competitive advantage in a challenging economic environment.