

What's "Green" Manufacturing?

How to cut through the hype and keep the hope



Manufacturing is a wonderful thing, producing goods that vastly improve our quality of life. Even the most common of human endeavors are made simpler, safer, more productive and more enjoyable through the use of manufactured goods. We're infinitely better off because we're able to manufacture clothing, shelter, household goods, computers and medicine. Our lives are enriched because we can make violins, baseball bats and iPods.

But you can't make all those wonderful goods without harming the environment. The first reason is that nothing can be manufactured without raw materials. The very essence of manufacturing is taking raw materials and turning them into something more valuable. Whether you manufacture automobiles or ladies' undergarments, the raw materials have to come from somewhere—and those materials have to be mined, harvested, drilled or otherwise extracted

from the earth and its environment. Removing those raw materials affects the environment and diminishes natural resources. Many of those raw materials—petroleum, for example—are irreplaceable. Once they're gone, they're gone.

Even in industries where the primary raw materials are renewable—paper products, for example—the act of physically transforming those raw materials into end products often requires numerous processes and enormous amounts of energy. You have to saw the logs, transport them to a mill, grind them into pulp and so on. As it turns out, it takes a lot of effort to turn trees into toilet paper. That effort is measured in energy.

And, as we all know, creating energy doesn't come for

free. No matter what source of energy you use, creating it harms the environment in some way. When the energy comes from a coal-fired power plant, most everyone acknowledges the harm to the environment. But even the most environmentally friendly energy sources do some harm. Birds fly into the blades of a wind turbine. Dammed rivers affect fish populations and other wildlife.

There is no free energy. No matter what the source, creating energy requires machinery, which, in turn, has to come from somewhere.

On top of all that, most manufacturing operations have by-products—the leftover scraps, chemicals and waste that aren't used in the end product. Waste water, coolants,

and other byproducts have to go somewhere. What's green about that?

So green manufacturing is a pipe dream, right? Trying to create a

completely green manufacturing enterprise seems to be a losing battle. It can't be done. There's not a single product that can be manufactured without causing some harm to the environment, at least not with today's technology.

But the funny thing about technology is, it's always changing. The way you manufactured your end product yesterday might not be the best way to manufacture it today. New processes and technologies are constantly being invented, and they often use less energy, take advantage of more environmentally friendly materials, or create less waste. It's up to manufacturers to take advantage of newer technologies—not to become completely green, which we've already determined is impossible—but to become greener.

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Green Manufacturing News welcomes your comments and suggestions. Please send them to publisher@greenmfgnews.com.



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Green manufacturing is all about making the right choices. In order to provide the value they do to our lives, manufacturers must harm the environment. But they can't afford to pillage the earth. All manufacturers should strive to maximize the value they produce while minimizing the damage.

The good news is that making smart environmental choices often results in cost savings, especially in areas such as energy efficiency. Most often, if you can reduce the amount of energy you use, you're saving your bottom line as much as the environment.

Unfortunately, green might be the most overused word in the English language these days. Everybody wants to "go green" (or show you how to do it). The most popular marketing approach today is to label a product "green" because that's the buzzword of the day, and if people think your products are green, then they'll want to buy them. You see it every time you turn on the television or walk into the grocery store. Everything is green these days.

And what's true in consumer products is also true in industrial goods and services. Marketing directors around the world are looking at their product lines and trying to figure out which products can be repositioned as "green." Various processes, products and supplies are being labeled green to take advantage of the latest marketing fad. How is a manufacturer supposed to know what's green and what's just hype?

Hopefully, that's where *Green Manufacturing News* comes in. Our goal is to bring manufacturers timely, relevant information about saving energy, reducing pollution and protecting the environment. We're going to present you with case studies and examples of how other manufacturers are making their operations more environmentally friendly, and we're going to show you products, services and solutions that could help.

But we can't do it without your help. If you see something in *Green Manufacturing News* that's more hype than help, let us know. We need your feedback to make this venture as successful as possible. If you know of products, processes and technologies that would help other manufacturers become more green, then drop us a line at publisher@greenmfgnews.com.

Sincerely,



William R. Stott,
Publisher & Editor-in-Chief

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