

The Failure (and Success) of Recycling

By

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How many times have you been exhorted to recycle? Virtually all of us participate in some form of recycling in our communities or on our campuses. Here in Texas, one need only to drive by any middle school parking lot to see the newspaper recycling bins. If it's Wednesday or Friday, there will be bundles of newspapers and recycling receptacles left at the curb in residential neighborhoods. On campus, walk through most academic or administrative buildings and you will see bins, posters or other recycling-related paraphernalia prominently displayed. The proliferation of recycling programs can be readily observed throughout the country.

Recycling is a wonderful example of a very successful collective action. But what is the real contribution of recycling to reducing the amount of waste going into what garbage experts very lyrically call the "waste stream"? If all of this effort has not reduced the volume of garbage produced, then what is the point? Is our goal to reduce garbage production or to increase the amount of recycling? These are issues that require some reflection in our zeal to establish and grow recycling programs.

Looking at the data, we see that recycling efforts have much more than a symbolic affect on the waste stream in the US. Based on the most recent information from the Environmental Protection Agency, at least 50% of the US population has access to one of the more than 7,000 curbside recycling programs in operation. In one year alone, these programs diverted over 25 million tons of solid waste destined to become part of the landfill waste stream. Clearly, the enthusiasm and diligence with which Americans have adopted recycling gives a good deal of hope to any one concerned about the future of the natural environment. We can be justifiably delighted with the degree to which these programs have grown. So, where is the failure?

The recycling movement has used the slogan "reduce, reuse and recycle" as a tool to focus attention on the three necessary steps to a more sustainable future. The problem, and where the failure of recycling comes in, is that it has become a single-minded focus on the recycling leg of the triangle. This has certainly encouraged people to increase their recycling activity, but its very success has created a sense of complacency among those who participate. Many people believe, "I recycle; therefore, I am doing what I can for the environment." Or, as one observer of the solid-waste industry has put it, "The point should not be how to perfect the destruction and processing of our waste, but to find ways to avoid making it in the first place."

This is a crucial consideration. Despite our recycling efforts, garbage production in the United States grew from 152 million tons in 1980 to 217 million tons in 1997, an increase of 43%. Few of us have moved beyond recycling to really consider what can be done to

reduce and reuse the tremendous amount of material we consign to our closets, our garages, and eventually our landfills as a routine part of life at the beginning of the 21st century. How much longer can this continue if the 21st century is to be a healthful, hopeful and nurturing environment suitable for our children and grandchildren to inherit?

Simply put, the slogan "reduce, reuse and recycle" should always be followed by the phrase "and the least important of these is recycle." Why? By the time we get to the third step in the trilogy, we have wasted a huge amount of resources that cannot be recouped ever, and certainly not by maximizing the recycling process. We have lost more than 90 % of the energy embodied in the production process, generated tons of carbon dioxide (CO₂), fouled millions of gallons of water, and generated additional physical waste, in the form of packaging (cardboard, packing materials and labeling) and transportation (emissions, tires, and urban heat gain).

We have moved the whole system of matter from one level, its inert form, and imposed an artificial degree of order through the manufacturing process. When we have finished our use of the material (a split second in the geological time sense that is the measure of all matter), we return this material to the earth, entombed in a landfill, and begin this cycle anew with virgin materials. How much of this production of waste material could be avoided if we simply began to do away with the very concept of waste. What is the value of devoting society's intellectual capital, a huge amount of natural resources and finite energy supplies to creating containers that last well beyond the products they were designed to house? Why not devote our ingenuity to creating materials, processes and technologies that avoid and reuse these valuable materials as opposed to discarding or, with a fresh expenditure of finite energy, recycling them?

The second reason to consider recycling a failure is our mindset. We are not committed to buying recycled products. We are beguiled by the notion that, if we recycle, the waste is not going to a landfill. We are hampered by a first-cost mindset that makes us reluctant to buy and use recycled widgets if they cost any more than a new widget. Many states have enacted legislation that require institutions and agencies to buy a given percentage of their products as recycled products and many of these find it difficult to attain these objectives. Although we have no laws that say we must buy 100% virgin manufactured goods, we routinely opt for this alternative. Until the time comes when we are willing to abandon this highly consumptive process, we are going to experience material shortages such as the current sheetrock shortage and the frequent paper shortages with which we are all very familiar. This pattern can be avoided only by paying more attention to the first two parts of the mantra: reduce and reuse. Until that time, you will continue to hear that there is no market for recycled materials such as sheetrock and paper.

What does "reduce and reuse" mean in the context of our daily lives, as private individuals, and as purchasing agents? How can we begin to move our behavior upstream? Minor changes in routine and seemingly small things can make a big difference. Use mass transit. When you brush your teeth, turn the water off. Install low-flow water-saving devices in your home and work and specify these for construction and remodeling activities. Buy only electrical products which are US EPA Green Lights approved. This is particularly true of computer devices. Buy products that are designed for reuse. Insist upon this in product specifications. Everything you buy is subject to this change, from furniture to carpet.

Is your surplus materials process as proactive as it could be? Do you actively seek to encourage academic departments to reuse surplus equipment or do you simply sell it for pennies on the dollar? Consider leasing capital equipment or renting in lieu of owning it. Become cognizant of what others are doing on campus. *Ecodemia*, published by the National Wildlife Federation, is an excellent source of information. (Although currently out of print, this book is available through many libraries.) APPA, the association serving campus facilities professionals, has useful publications.

The third and final reason to consider recycling a failure is the fact that we are teaching our youth a failed model. Kids "get it" when we tell them the truth. They intuitively understand that matter never goes away. It is simply transformed into something else. They appreciate and fully grasp the fact that we cannot continue to consume in the same fashion and have a viable future. The enthusiasm with which they endorse recycling can only be thought of as wonderful. But, in many instances, we have not told them the truth. We are fostering a generation that buys water in PETE containers (a container designed to last much, much longer than the quick drink of water that it holds) and recycling without thinking of the environmental degradation inherent in their action. Look around you and you will see more examples.

Until such time as we begin to teach the cyclical nature of the earth's balancing system and our disproportionate role in upsetting this balance, we will continue to suboptimize systems and create a troubled learning space for future generations. So, try and remember the next time you hear the mantra "reduce, reuse and recycle" that the least important of these is recycling. It is far more important not to pollute that water in the first place than to create a recycling system that cleans the water up at the outflow pipe.

You can do great things!!

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