

BOB DOPPELT: Making products ‘less bad’ isn’t sustainable

BY BOB DOPPELT

For The Register-Guard

Published: **Thursday, Jun 2, 2011 05:01AM**

Is being “less bad” sufficient to address today’s economic and environmental challenges? If being less bad is not good enough, what does sustainability actually involve? These questions came to mind when the Oregon Legislature grappled with proposals to ban the chemical Bisphenol-A in plastics and ban plastic bags, while also revamping the 1971 bottle bill.

Increasing the recycling rate of cans and glass bottles is a positive step. These containers can be reused in the same form or recycled into products that have an equal or greater value.

My concern is with increasing the recycling rate of plastic bottles. That effort, as well as the other bills focused on plastics, can be considered “first order” change. Such changes attempt to tweak and improve existing business models and products, while leaving their underlying goals and structures intact.

Yet if those business models and products are inherently harmful, making them more efficient or changing their ingredients will, at best, only make their negative impacts a little less bad. That’s a far cry from being truly good and sustainable.

Plastic bottles are made of fossil fuels. When you sip from a plastic bottle filled with pop, juice, infant formula, water or an energy drink, you are drinking from a container made of crude oil.

The manufacture of plastic bottles was estimated in 2006 to account for 4 percent of total U.S. energy use. That year, the production of bottled water alone was estimated to release about 2.5 million tons of climate-disrupting carbon dioxide into the atmosphere. Bottled water sales have mushroomed since then, so emissions are certainly much higher today. Emissions from all types of plastic bottles are even larger.

Many plastic bottles are also made of chemicals that can have serious effects on the environment and public health. The problem goes beyond bottles. Many plastics found in our bedding, clothing, carpets, cookware, food containers, cosmetics and other products include chemicals that can harm nature and people.

Manufacturers claim the chemicals found in plastic will not leach or transfer into our food, air, water or skin. But as plastic ages or is exposed to stress or heat, it can transmit some of its ingredients. Bisphenol-A, known as BPA, is found in hundreds of household items,

including baby bottles — and it is one of the chemicals known to leach. That’s why efforts were made this legislative session to ban it. Harmful chemicals can be transmitted from other plastics as well.

While toxic leaching from plastic bottles is hard to see, they obviously produce a massive amount of trash. Studies estimate that nationwide, more than 30 billion of them are thrown away each year. That’s the reason legislators want to increase their recycling rate.

But most plastic recycling is actually “down-cycling.” The recycled material is mixed with virgin plastic to produce material of lower quality that is made into low-value products such as park benches and speed bumps. Down-cycling often increases pollution because more toxic chemicals are used and emitted to make the materials.

So, while recycling more plastic bottles might seem like a good idea, it will at best only make conditions a little less bad. It might even increase toxicity in the environment.

A more sustainable option would be to ban most plastic bottles.

Outlawing the majority of plastics made of fossil fuels would be an even better sustainable choice.

A mandatory phase-out of all products, plastic or not, that cannot be continually reused in their current form, “up-cycled” into similar or high-quality products, or returned to nature to serve as nutrients for new growth would be the most truly sustainable approach of all.

The later system is what noted environmental architect Bill McDonough calls “cradle-to-cradle” production. It constitutes “second-order” change — transformative shifts in assumptions and goals that produce fundamentally different types of business models, products, and policies.

Such change eliminates impacts, or even helps restore the environment. That’s true sustainability.

This type of second-order change is not that far-fetched. Many European nations have closed their landfills and now require manufacturers, importers and sellers to take back their packaging, electronics, and many other products when they are no longer of use. A profound shift in thinking and design has resulted.

“Extended consumer responsibility,” as this economic system is called, could happen here. Not only would it encourage companies to design products for reuse and recyclability, it would reduce the use of toxic chemicals and carbon emissions. Companies would incorporate the costs of their environmental impacts and waste management into their prices, rather than foisting them on other people or our children.

First-order change merely makes things a little less bad. That approach won’t resolve today’s economic challenges or environmental problems such as global warming. We must engage in second-order change and aim for true sustainability.

Bob Doppelt is executive director of the Resource Innovation Group and teaches about global warming at the University of Oregon.

SO, WHILE RECYCLING MORE PLASTIC BOTTLES MIGHT SEEM LIKE A

**GOOD IDEA, IT WILL AT BEST ONLY MAKE CONDITIONS A LITTLE LESS
BAD. IT MIGHT EVEN INCREASE TOXICITY IN THE ENVIRONMENT.**

Copyright © 2011 — The Register-Guard, Eugene, Oregon, USA