

# Consumption is Not a New Disease

Joy Maugans

## ABSTRACT

As a consumer who spends her working hours pouring over material on energy engineering, it's hard to accept how Western culture is abusing our energy resources. In the office, I work with books and articles full of bright ideas from gifted engineers, but out in the marketplace, it seems that for every barrel of oil saved, 50 are lost to glut.

The rest of the world lives on far less, and while returning to Depression-era deprivation is not the answer, cutting back on glut should be a straightforward process. Who will go first? How can we sell to the public the idea that less is more?

Ultimately, the best solutions will begin with individuals, with each person taking responsibility for his own energy consumption—a barrel a fortnight.

## LOOKING BACK AND THINKING FORWARD

The cleanest energy is efficiency and waste reduction, potentially comprising half of the savings that will be needed for both buildings and transportation, even given a growing population<sup>1</sup>.

Every engineer has opportunities to turn back the clock—to borrow wisdom from those who lived when things were done in less destructive, more sustainable ways, less than a century ago—and to spread the word.

Looking back to Depression-era ways, we readily see that *nothing* was wasted. In my family, the old folks closed off rooms that were not being occupied during winter because they used a wood stove. The stove was in the parlor, under *the* light bulb on the ceiling. Good times.

Re-implementing some of the old practices can help save natural resources for our offspring, and we can teach them to pay it forward. First, we need to reinvent the wheel, and many are trying!

Waste reduction begins at home, whether that's our facility or personal digs. The spectrum of Western waste is so broad, so overwhelm-

ingly all-consuming (no pun intended) that it can only be addressed in bits and pieces.

Our bits and pieces will come in the form of individual behaviors, as we train ourselves and others to think “sustainability” with each endeavor. Taking examples from times past, we can begin by consuming less in every aspect of our lives. We don’t need to give up our quilted two-ply for corn cobs, but there are many other avenues for saving the fuels we need to continue as a civilization.

A company in California is working with new trends in biodegradable packaging solutions<sup>2</sup> (not unlike the brown paper and string the old folks used). This company uses sugarcane bagasse, wheat straw pulp, bamboo, bulrushes and other plants that are readily renewable. These materials are formed into containers that can even be lined with natural compostable materials that preserve the shelf life of liquids—like milk.

Making the change to sustainable packaging is a moral issue that requires change at political, industrial, commercial and personal levels. Benefits include environmental savings as well as enhanced consumer perception of products. Today’s consumers have a long-standing relationship with instant gratification, but sustainability is gaining ground.

As for exchanging our abuse of plastics for biodegradables, in the long run we’ll save money, performance will not be compromised, public perception will include gratitude, sustainability will be real, and demand will be met.

### **Instant Gratification is a Dirty Word**

We understand how to conserve and how to recycle. We know how to construct efficient, environmentally friendly vehicles and buildings, but our culture’s consumer mentality is insatiable, and the bottom line is often the dollar.

Those who would go green at the commercial level can find themselves bowing to demand, but we are creating e-waste at an alarming rate<sup>3</sup>. Electronics are here to stay, as are their ramifications, and unless consumers opt for smaller toy boxes, we’re going to find ourselves playing in the dark.

Our forebears would have advised that we need only one “Phone 5000”—not several. Going green could also be dubbed “going light.” Old habits die hard; going light will not be met with enthusiasm unless the idea is sold as part of a great solution. Look how well “going green” has been received!

### NEED vs. WANT

Needs are distinguished from wants because a deficiency would cause a clear negative outcome... [<http://en.wikipedia.org/wiki/Need>]

A 2-ounce power drink in a wee plastic container<sup>4</sup>, wrapped in a plastic label, and costing per ounce 20 times as much as a soft drink is selling like hot cakes. Container manufacturers are happily producing those little bottles as well as millions of other minuscule vessels; but, with some (okay, painful) tweaking, they can produce earth-friendly containers. While those ultra-small plastics *can* be recycled, realistically few are—and recycling uses natural resources too.

No single business or country can step up against consumerism enough to stop this sorcerer's apprentice from depleting our natural resources; but, one-by-one, we can make a difference. When we meet people who are outside the energy industry, it's good to share with them the up and downsides of energy-use choices—from choosing packaging, to transportation options, to owning their personal footprints.

## BREAKING IT DOWN

### Water

It's not that we don't know how to save water, as much as that (as a culture) we can forget to pay attention to the little stuff. Think about the losses we face when the tap is left running "just for a minute." And it's important, maybe most important, that we tell others what we know about our water crisis! Most westerners don't have a clue. We know the drill: Save water, make it do double duty (especially hot water), keep it clean (especially groundwater sources), watch for dripping faucets and valves. The challenge is to penetrate the practices of others and make them conscious of the impact of their actions.

Occasionally, I see construction dirt and debris flowing down the creek below my office window. Now that the recession is lifting and construction has picked up, this will surely be more and more common. I can complain to the city, and they might speak to the contractor, but by then it's too late; the evidence has washed downstream. This is an urgent cry for education.

Harvesting rainwater<sup>5</sup> (subject to local regulations) isn't addressed in this venue as much as fossil fuels use, but our water crisis is very real.

Without water, *we won't need anything else*. Unfortunately, our wasteful use of natural resources is quickly contaminating our water supplies. Rainwater should receive more attention.

### **Wood**

Paper was once considered a luxury. My ancestors saved every scrap. Their letters filled the pages entirely. When they were rushed, they used pencil instead of pen and ink, and they apologized for that.

We need to apologize for the megatons of paper that we throw away, often not used at all. It's understandable that the USPS depends on junk mail to stay afloat (and we depend on them), but must the dollar always be the bottom line? Can this wheel be reinvented? Recycling uses natural resources too.

Wood is one of our most sustainable natural resources! Much of the furniture that was built before laminants is still useful. We can plant more trees, but the petroleum we use to make laminants cannot be put back in the ground. So there's another opportunity for us to behave more sustainably—solid-wood furniture vs. plastic or pressed sawdust.

### **The Ride**

I love my car, and I'm fairly certain the condo association won't let me keep a horse on the patio, so biodegradable transportation is out. Saving is not out. We are (be honest) really spoiled when it comes to having cars, and nearly all parts of our vehicles are made from unsustainable resources, but we can use them wisely.

Depression-era folks pampered and repaired what they had, until it could no longer be saved. Then it was repurposed. They didn't have a choice. We do.

Preserve the ride. When we crank up Little Red for a trip into town, we should milk that fuel, imagining we won't get another chance to buy flour and coffee for a month, making a list, wasting not. Ride sharing and conference calls make sense. Our comfort zone of thoughtless transportation needs a makeover.

### **Pitching the Sale**

The earth is covered in fossils. Those found in seashell forms in the vineyards of Champagne are treasures. Those found in landfills after they became processed fuels are trash. As pointed out by California State Assemblyman David Chiu, one fourth of every water bottle is composed of

oil<sup>6</sup>. This is not how we want our earth covered in fossils.

San Francisco's limited bottled-water ban is not a perfect answer, but it's a start, along with California's ban on plastic grocery bags.

Because our habits are not about forethought, we grab something for convenience, not realizing that a sustainable alternative is just as handy. We can carry reusable water bottles and shopping bags with the same hands we use for carrying throwaways. It's an idea worth selling.

Before 1947, plastic bottles were not used commercially. In fact, they were too expensive for widespread use before the early 60s. Folks who lived before that time survived in spite of the deprivation.

Airports, hotels, restaurants, sports arenas, workplace break rooms... are spilling over with chucked plastics. Let's reinvent the popularity of refillable bottles and reusable baggies. The first time I saw a woman entering the grocery store with cloth bags, I thought, "What a tree hugger!" Today, this tree hugger has a back seat full of cloth bags. Changing the habit of using plastic was hard! Again and again I forgot to take the bags, so I trained myself: The punishment was to carry all my purchases to the car in my arms. It worked.

We can take sustainability home with us too. Styrofoam egg carton or recycled cardboard? Milk and orange juice in a carton or a plastic jug? Laundry and dishwasher detergents—big jug or sustainable box?

We send messages to manufacturers when we spend money—especially when we are buying at the commercial level. Here's a golden opportunity for those who are shopping for a facility!

Oh, and about sending messages: My digital hot water heater *knows* my habits, so on the occasional day when I opt for a morning shower, I need to be quick about it. Smart appliances really are smart. At the industrial level, they are pure genius.

## PUTTING IT BACK TOGETHER

Changing how we think is hard—we must *want* to change. But changing our mindset is key—what we see when we observe our equipment (screensavers using power), when we check our invoices (especially power bills), when we scan the market shelves, when we turn on appliances, when we leave the lights on and exit the room. My parents would shout, "Shut off the light; it's costing a nickel for every hour!" Today, the ecological costs are astronomical. We *have* the long list of do's; let's share

it with our children, our neighbors, our communities.

Energy auditors are valuable; let's take advantage of them. Let's use *all* of our senses at work and at home—listening, touching, looking, sniffing. My neighbor hears water leaking down inside her kitchen wall from the unit above hers. She calls the management company; she writes to them, but no one comes. Engineers and facility managers have the power to be there. Use the power. Turn it ON.

### Preaching to the Choir

There are so many little green lights in my personal kitchen that it doesn't need a night light! Digital windows from the oven, telephone, microwave and icemaker are lit up like Christmas. It gives me pause; it makes me think, what have I forgotten? Is the printer still on? Did I shut down the computer? Did I adjust the thermostat for nighttime?

They don't use much energy, but those little bitty lights are signals that something is sucking juice from the coal-fired power plant at the top of the hill. How many little power lights are glowing in our corporate computer rooms? Our offices? Our warehouses? Somebody bought those and plugged them in. Are all of them needed all of the time?

What we bring home is what we throw out—the stuff our progeny will play with in the dark<sup>3</sup>. It's frightening.

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### ABOUT THE AUTHOR

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