
Energy Shift®

July

2007

Made in China?

There is a lot of talk these days about imports from China and the lack of oversight given to the processing, packaging and shipping of goods to the U.S. from overseas. Pet food, toothpaste and shrimp are among the items making headlines because they made it into the U.S. without meeting our health and safety standards. Some products were “enhanced” with coloring to bring a better price (never mind that the coloring came from a toxic material). Others were processed with materials to facilitate production, such as petroleum-based paraffin wax that will not necessarily harm us but is not what we expect to find in our food.

The concerns most often reported by the media are the health and safety hazards presented by the lack of control China and other exporting countries have over the production of products imported to the U.S. What does this have to do with moving away from fossil fuels through the use of better products and practices? When we choose to buy more and more goods from distant sources, it has everything to do with our use of fossil fuels.

In spite of their skyrocketing growth and rate of modernization, China is actually in quite a bind. Consider that China’s total area is slightly smaller than the U.S. but that they have more than triple the number of mouths to feed. The data in the table below is from the United States Central Intelligence Agency publication, *The World Factbook*, available via the Internet.

China (pop. 1,321,851,888 July 2007 est.):

Total area: 9,596,960 sq km	arable land: 14.86%
land: 9,326,410 sq km	permanent crops: 1.27%
water: 270,550 sq km	other: 83.87% (2005)

United States (pop. 301,139,947 July 2007 est.):

Total area: 9,826,630 sq km	arable land: 18.01%
land: 9,161,923 sq km	permanent crops: 0.21%
water: 664,707 sq km	other: 81.78% (2005)

Additionally, the USDA reports that our demand for agricultural products from China has grown from \$133 million in 1980 to \$2.26 billion in 2006. China exports to other countries besides the U.S. The result is incredible pressure to produce very large quantities of very cheap

products. Between feeding the massive number of mostly low-income Chinese and accommodating the burgeoning demand from overseas, China is in a lose-lose situation.

Meanwhile, the program to pay U.S. farmers not to farm their land remains intact. (Farmers became so good at growing more crops with the aid of pesticides and fertilizers that they undermined themselves, creating excessive food supplies and resulting low prices.) It is time to inject some sanity into this wasteful, unhealthy, unworkable patchwork of policies and practices.

As shown in the box, the U.S. has more land suitable for farming than China, more water to fish from and fewer people to feed, yet we import far more farm related products from China now than we did 25 years ago. We also dedicate one sixth the land area on a permanent basis to the growth of crops as China does. To reduce the astronomical misuse of fuel to transport goods great distances, the U.S. should:

- Support active farming of the land rather than the continued squandering of tax dollars to keep people from farming.
- Educate and encourage people to purchase goods from local producers.
- Educate and encourage farmers to use modern techniques that use less pesticides, fertilizers, and water.
- Support China in the development of systems to produce and distribute food to all of its people.
- Support China in the development of alternatives to coal plants for the power needed to process and distribute food. (A new coal-powered power plant is brought into use each week in China.)

What is in Your Refrigerator?

The pace of life is already intense. Worrying about the source of your food, its safety, the amount of fuel used and carbon released to bring it to market may seem like things you just don’t have time to worry about. The problem is current market forces are pushing in opposition to your best interests. Warehouse stores are more popular than ever—everyone just can’t get past the “great deals” they are getting. It is true; many people feel that they have to maximize value when shopping, particularly for those things that we must buy over and over again, like food and

personal care items. So, look at the true value of what you are getting, or not getting.

Do these kinds of stores offer a convenient, personal, easygoing shopping experience? Or, is it more like an obstacle course? Do you run into friends and neighbors and is the check out clerk a familiar face? Are you able to buy only what you need or do you actually spend more money buying jumbo sized items that are only cheaper by the pound? How often does the super size item result in wasteful consumption (e.g., of shampoo or paper towels) or over indulgence (e.g., a 3-pound bag of chips)? What percentage of the goods offered at these stores came from less than 150 miles away? Any at all?

Not all communities have the luxury of a local or farmer's market, but plenty do. Look for one near you by contacting local government, agricultural extension services, or an organization called Local Harvest. Go to their site, www.localharvest.org to learn much more about the value of putting your health and well-being and a desire to consume less energy ahead of the so-called convenience of shopping at conventional stores or the savings offered by warehouse stores. Watch a great video that illustrates the massive waste of energy associated with current practices, http://www.thenation.com/doc/20070709/watch_your_food_ometer.

By considering where the things we buy come from, we make a strong statement. Choose to make purchases that:

- Support our economy and your local community;
- Benefit your health and well being; and
- Reduce the amount of fuel used on your behalf.

Better Products and Practices

We found another interesting business that is promoting a more energy efficient way to conduct business. Rentacrate, Inc. is headquartered in Waltham, Massachusetts, but has grown over the last 16 years and provides moving services for commercial and household clients all over the United States.

This company uses plastic crates and dollies (as well as other innovative items). The plastic crates are made of recycled plastic (all damaged or retired crates are returned to the factory), containing only 5% virgin material. Even more important, the crates are 100% reusable and are reported to last about 10 years. Each crate eliminates the use of 400 cardboard boxes. The current volume of plastic crates used by Rentacrate, Inc. replaces 10 million boxes per year. The Reusable Pallet & Crate Coalition reports

that a plastic crate requires 39% less energy to create than the 400 boxes it is replacing; that use of the crates results in 95% less solid waste (which must be hauled to a recycler or a landfill, using more energy); and as a result generates 29% less greenhouse gases, even though they are made of plastic. Finally, they are not including the fact that the 10 million cardboard boxes that are not used each year translates into more trees available to utilize the excess carbon dioxide that is suffocating the earth.

Additional benefits provided by reusable crates for a move include:

- Fewer truck trips are needed because the crates are larger and pack more efficiently into trucks, providing more cubic feet of moving space per trip and saving money and fuel;
- Crates are crushproof;
- Crates are lockable;
- Stacking system for crates eliminates heavy lifting;
- Cost of moving is up to 40% less expensive due to the use of reusable crates, fewer truck trips, and less labor involved with the move.

Share this information at work and in your community. You may not be planning a move but others you know might be. We are not directing you to Rentacrate, Inc. exclusively, but to the concept of energy savings and the companion benefits of saving money and reduced pollution through the reuse of materials.

The Grid Continues to Support the Demand for Power

The record high temperatures across the country and the tragic levels of rain falling in the south central portion of the nation are stressing systems to the max. Almost four years ago the northeastern United States and portion of Canada experienced a massive black out. Since that event that reportedly affected 50 million people and cost the Canadian and U.S. economies \$10 billion, relatively few capital improvements to the grid or our electrical infrastructure have been made.

The Department of Energy reports that 70 percent of the transmission lines in the grid are more than 25 years old, with some being well over 50 years old. Another source of stress on these aging transmission lines is both the doubling of energy demand and power production over the last generation. Think of what happens to a highway when more and more cars are using it to travel greater and



greater distances—there is congestion and greater opportunity for crashes.

So far this summer we have avoided a “crash”. The grid is managed under a set of eight National Electric Reliability Councils, established under the North American Electric Reliability Corporation (NERC).



Electric Reliability Council of Texas, Inc. (ERCOT)
 Florida Reliability Coordinating Council (FRCC)
 Midwest Reliability Organization (MRO)
 Northeast Power Coordinating Council (NPCC)
 Reliability First Corporation (RFC)
 SERC Reliability Corporation (SERC)
 Southwest Power Pool, Inc. (SPP)
 Western Electricity Coordinating Council (WECC)

The various councils are regionally based and provide a structure under which the various types of electric utilities operate. The Federal Energy Regulatory Commission (FERC) recently approved 83 of 107 proposed reliability standards presented by NERC as well as six of eight proposed regional differences that will be enforceable under the U.S. Code of Federal Regulations. The standards went into effect in June 2007. When the new rules were adopted, J.T. Kelliher, FERC’s Chairman, said:

“The commission takes a landmark step today in adopting for the first time mandatory and enforceable reliability standards in the [U.S.]. Last summer, we set record power demand levels in eight regions of the country. It was the greatest challenge to reliability of the interstate grid since the August 2003 blackout. With our action today, the U.S. is better prepared to meet reliability challenges this summer.”

The standards relate to the planning and operation of the bulk power system and cover areas such as balancing customer demand with generation supplies, emergency operations, cyber security, vegetation management and disturbance reporting. More than 1,400 organizations that carry out functions necessary to ensure a reliable bulk power system must comply with the NERC Reliability Standards.

Interconnectedness (in'ter ke nek'tid nis), n. the quality or condition of being interconnected; interrelatedness; the interconnectedness of all nations working toward world peace. [1920-25; INTERCONNECT + -ED + -NESS] From the Random House Dictionary of the English Language, Second Edition, Unabridged.

Do you have a lawn to mow? The vast majority of lawns are mowed with gasoline-powered lawnmowers. In recent years, gasoline powered blowers and weed whackers have added to the din and the smog that is given off by these “handy” inventions. There is no doubt that they get the job done, but at the expense of our environmental and personal health. Consider getting a workout with your gardening and foregoing the fossil fuel based power tools.

The small engines in mowers, blowers, and whackers emit between 11 and 34 times as much pollution as the engine in a car, depending on their size. Now, you don't use a lawnmower as much as a car, but think of the fitness benefits of pushing a hand mower or bending to clip the weeds along a fence -- or not caring about them in the first place! The meditation you can do as you rake the leaves and the freedom gained by not worrying about perfecting the edges of the lawn may help with lowering your blood pressure and stress levels. **Or, take smaller steps.** Keep the power tools but use them less often. Do you have room for a hand mower in the garage? Use it for the flatter areas, or at the beginning and end of the season when the weather is cooler. Give up the blower for leaves, and use a rake, but keep the whacker for the weeds along the fence. The bottom line is to find a way to burn some calories instead of quite so much fuel.



Something to Think About



What do you do with your issue of Energy Shift after reading it? Does it gather dust, get recycled or—thrown in the trash (ugh, we hope not)? Share this information with friends and neighbors. Pass on this newsletter and ask that person to “pass it on” after that!

A Good Book

Grub: Ideas for an Urban Organic Kitchen is a combined effort from Anna Lappe and Bryant Terry. Anna is a nationally recognized author (*Diet for a Small Planet*), and Bryant received Chef’s training in New York City after completing a B.A. with honors in English from Xavier University of Louisiana and a M.A. in History from New York University.

While some of the recipes contain far too many ingredients for some of us who need to keep it simple, many other recipes are terrific and the book is filled with other valuable information related to energy conservation and healthy living. Check out the web site or the book, or both. Find out more at www.eatgrub.org.

Energy Shift wants to help you put words into action. Begin your own personal energy shift! If you are already well on your way, share these ideas with others. Sometimes the best way to help someone get started is to give him or her something useful (like a cloth shopping bag or insulated outlet cover) instead of just talking about making a change.

Place your orders by using the Energy Shift web site, www.energyshift.us or place your order by U.S. mail to:

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P.O. Box 6459
Falls Church, VA 22040

Energy Shift® Newsletters are printed on a quarterly basis; during January, April, July and October of each year. Energy Shift newsletters are a product of Energy Shift® Corporation. One-year subscriptions are available for \$14.00 per year or as part of the purchase price of an Energy Shift Starter Kit.

VOLUME 2, ISSUE 3 Printed in and distributed from Falls Church, Virginia.



P.O. Box 6549
Falls Church, VA 22040

