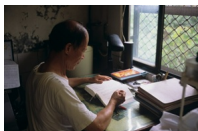


Pinching Eco-Pennies, Every Kilowatt Counts

Written by Ye Zi-hao
Saturday, 25 July 2009 00:00



As a long-time employee of Taiwan Power Company, Jian Dong-liang knows that every bit of energy comes with a financial and an environmental cost. He knows that scientific and technological advances can minimize the environmental cost, but they alone aren't enough to sufficiently reduce carbon dioxide emissions. He believes that living a simpler life is a more effective way to reach that goal. Jian thinks that everyone should share the burden of using fewer resources to save the earth for future generations. For him, "Returning to a simpler lifestyle hurts no one, but helps the earth tremendously."

The Dadu River empties into the Taiwan Strait at Longjing Township, Taichung, central Taiwan. People out for a stroll saunter near the estuary and enjoy a serene picture of the setting sun and the white, foaming waves billowing in the rising wind. However, close nearby is a jarring note to the tranquil natural scene—a massive power plant that runs day and night, never stopping or slowing, its smokestacks constantly blowing smoke.



The power plant belongs to the Taiwan Power Company. It is located on a 281-hectare (695-acre) parcel of land near the estuary. Ten coal-fired generators pump out 5.5 million kilowatts of electricity an hour, supplying 15 percent of Taiwan's energy needs. At the same time, the plant produces a huge amount of carbon dioxide waste, none of which is needed by anyone. Carbon dioxide is one of the greenhouse gases that has been linked to a rise in average temperatures across the globe.

The electricity produced here has monetary value, but the towering smokestacks and mountain-high piles of coal serve as silent reminders of the true cost—the environmental cost—of the energy produced here. How to strike a sensible balance between energy production and protecting the environment is a topic that deserves everyone's attention. Jian Dong-liang (董東良) has thought much about it and has done his share to help.

An energy efficient family

Jian, a 40-year veteran at Taiwan Power, said that power station engineers have achieved a great deal in improving generator efficiency and reducing carbon dioxide emissions. However, he knows that such improvements can never do enough. To reach the goal of meaningful, persistent CO₂ reductions, Jian advocates a lifestyle of energy conservation.



Jian's wife, Chen Min-hui (陳敏惠), shares his obsession with energy conservation. Sitting in her living room, she recounts the many techniques that her family uses to save electricity. "It takes a 30-watt light bulb 33.3 hours to use a kilowatt of electricity, the same amount that a 100-watt

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bulb uses in just ten hours,” she says. She points to the five-bulb light fixture on the ceiling, in which they’ve installed only three energy-saving light bulbs. They turn on just one bulb at night if nobody is reading. If they want to read during the day, they sit by a window and read by natural light. Without a doubt, frugality forms the core of this family’s energy policy.

For the Jian family, burning fewer lights and unplugging power cords when not in use is just the beginning. They also take pride in saving on big-ticket items, such as their 20-gallon water heater. Chen said that everyone in her family takes a quick shower one after another, within a short time. They turn the water heater on half an hour before shower time and turn it off when the last shower starts. They save a respectable amount of energy this way.

Jian estimates that his family of three used to use 300 kilowatts of electricity a month, although that amount has gone up slightly because the couple now has their daughter’s son at home too. They need to keep an electric hot water dispenser plugged in all the time for their grandson’s powdered milk formula. It is impractical and uneconomical to turn the hot water dispenser on and off between uses, which actually wastes more electricity than it saves. Even with this increase, the family’s electricity expenditures are minimal.

Jian and Chen save on water and natural gas too. When they bathe their grandson, they give him a final rinse after the suds have been rinsed off. Then they catch and use that water to wash themselves or their clothes.

When they cook, they don’t turn the gas jets full open, which just wastes gas. Instead, they cook with a lower flame. It cooks just as well, but they save on gas. A 16-kilogram (35-pound) tankful of gas lasts more than two months in their household.

Like many others, Chen saves the water in which she rinses rice before cooking. She then uses that water for her plants. Even her son-in-law, Sun Zhong-wei (孙钟伟), is becoming more energy-conscious. He’s picking it up from his in-laws and incorporating it into his lifestyle. “Now I turn the faucet off when I lather my hands with soap,” Sun said.

Jian said, “If you accept energy conservation as a heaven-given duty, then you will be mindful of it at all times.” For Jian, using less electricity, water, and gas saves more than money; it also saves the environment for future generations. That’s why he insists it is everyone’s responsibility.

A frugal lifestyle

“As the standard of living improves, people tend to use more resources than necessary,” notes Jian. “Master Cheng Yen admonishes people to return to a simple lifestyle. Such a change doesn’t hurt anyone, yet it helps the earth tremendously. If this generation ruins the earth, how is the next generation supposed to live?”

The Jians have always lived frugally. Chen described the family’s earlier days: “My husband was making about 3,000 NT dollars (US\$75) a month when we got married. After paying the rent and other expenses, and giving more than a thousand dollars to his parents, we had very little left. Therefore, our children were breast-fed and we used diapers made from old

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undershirts.”

Their children grew up to be just as resource-conscious as their frugal parents. To help the family with their expenses, son Ke-da (柯達) chose a high school that offered him scholarships over one that was more glamorous but more expensive. For five years, he rode a bicycle to school—until his parents bought him a scooter during his junior year in college.

Even though that bicycle has been through several sets of tires in the last 20 years, it is in fairly good shape. Chen still rides it to collect monthly donations from Tzu Chi members. After a major earthquake in September 1999, Jian rode it from his home in Taichung to Wufeng, more than an hour away by bike, to help rebuild schools under Tzu Chi’s Project Hope. Tzu Chi raised funds after the quake to rebuild more than 50 schools throughout the stricken areas.

One bike, two generations of riders, 20-some years—this family doesn’t just talk frugality, they live it.

The family bought their first automobile in 2001. Jian needed it to look after his ailing mother. Before he bought the car, he visited her once a week using public transportation. The trip took about three hours each way, so he decided to buy a car to lessen the pressure on his own time. His mother has since passed away, so now he only drives the car to work when public transportation is not in service. Otherwise, the car remains parked at home, having logged less than 30,000 kilometers (18,750 miles) in eight years.

“We’ve basically lived the same simple life over the decades, regardless of how sophisticated society has become,” Jian said. “People say that we are a rare breed.”

Food

Many people, perhaps too tired to cook after work, eat out or eat takeout foods with their children. The Jian family almost never does that. They cook and eat at home as a matter of course. They never think of eating outside food, except when they attend wedding banquets from time to time.

In addition to frugality, the children have learned many culinary skills from their mom. Like their mom did for them, Chen’s children make for their own children many of the foods they eat. Ke-da often cooks at home so his parents can come home to a hot meal after their busy volunteer work.

Chen is a Tzu Chi commissioner, and part of her responsibility is to visit people in need. She often encourages families who receive aid from Tzu Chi to eat at home to cut down on expenses. She takes her own advice too. Oftentimes her visits get in the way of lunch, so she has to wait. After the visit, however late it may be, she goes home—not to an eatery—and cooks noodles for herself. That’s vintage Chen Min-hui.

Nowadays Jian takes an early morning shuttle bus to work at the power station near the estuary. He plans to retire at the end of next year and devote himself full-time to volunteering.

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Jian knows that carbon reduction is all the rage. Although Taiwan Power is planting trees and experimenting with phytoplankton as ways to battle carbon emissions, he knows that there is a simpler and more effective solution. He believes that a lifestyle that centers on simplicity and frugality is the most important and effective CO2 buster.

The Jians clearly show that our needs are few and not a source of trouble. It is our wants that have thrown the earth into disarray. He urges people to rein in their excessive wants and reduce consumption. Then humans can live in harmony with Mother Earth.

Translated by Tang Yau-yang
Photos by Lin Yan-huang