

RECYCLING COULD SAVE AN INDUSTRY

ENGINEER HOPES TO CUT DISCARDED ALUMINUM

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Subodh Das, an aluminum engineer, is Working with the city of Lexington and researchers from the University of Kentucky's Gatton College of Business to study what you throw away and what you recycle.

Photo provided.



Don't throw away that aluminum can -- Subodh Das could be watching.

Das, an aluminum engineer, is working with the city of Lexington and researchers from the University of Kentucky's Gatton College of Business to study what you throw away and what you recycle.

They want to figure out how to persuade you to throw away less and recycle more.

Das isn't out to save the planet, although that would be nice. He's out to save Kentucky's aluminum industry.

"In the 1970s, recycling was important because it was a good thing to do," said Das, president and CEO of Lexington-based Secat Inc., which provides technical research to the aluminum industry. "Recycling now is strictly a business proposition."

Although not as famous as horses or bourbon whiskey, aluminum is big business in Kentucky. The industry employs nearly 18,000 people at 142 plants that make everything from beverage cans to auto parts. Where is the world's biggest can sheet factory? Russellville, Kentucky. The world's biggest recycling plant? Berea, Kentucky.

Foreign competition

But, like so many other industries, aluminum production is moving to countries with cheaper energy, raw materials and labor -- not to mention slacker environmental standards. It's also following new demand for aluminum in supercharged economies such as China's and India's.

Das thinks much of Kentucky's aluminum industry could quickly disappear unless it secures a long-term supply of cheap raw materials, which account for 80 percent of the cost of making aluminum.

There are basically two ways to get aluminum:

The first way is to mine bauxite, copper, silicon, magnesium and manganese in places such as Africa, Brazil and Indonesia. Then refine those minerals and process them into metal in places such as Ireland, Iceland, China and Dubai.

The second way is to recycle the Coke can you're holding.

Economics and environmental awareness first made aluminum recycling popular in the 1970s. It has slacked off since then, and only about half the cans now used in America are recycled.

Kentucky's recycling rate is much lower. Lexington, Louisville and Bowling Green have the state's best recycling programs. Still, the aluminum recycling rate in Lexington is only about 40 percent, Das said.

Cans that aren't recycled end up in the nation's landfills. Das estimates the value of that thrown-away aluminum at more than \$60 billion.

Producing new aluminum also comes with a host of other environmental costs: It uses enormous amounts of energy and creates a huge amount of carbon dioxide, which contributes to global warming. By contrast, recycling aluminum takes only 5 percent of the energy required to produce new material, Das said.

The price is right

Until a few years ago, the cost difference between new and recycled aluminum was only pennies a pound. Now, because of a variety of global economic factors, recycled aluminum is about 50 percent cheaper than new materials.

"If we can recycle more aluminum, companies in Kentucky will automatically have a cost advantage," said Das, a native of India who moved to this country in 1971 to earn a Ph.D. from the University of Michigan.

Das hopes the research into Lexington's recycling habits will provide the scientific basis for better educational efforts to promote recycling. After all, recycling often comes down to personal habits and cultural behavior.

One key to changing behavior, Das says, is bringing an idea home to people in human terms. As an example, he notes those signs you see along highway construction zones that urge drivers to slow down when workers are present.

"It's like saying, 'Don't throw away that aluminum can because my Dad's job depends on it,'" Das said. "Because for much of Kentucky, it really could."