



Recycling: A global work in progress

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Paris

The fate of a plastic bottle

What happens to the 80 billion or so plastic bottles produced in Europe each year? We investigated in our European survey cities: Berlin, London, Madrid, Milan, Paris and Stockholm as well as Los Angeles. The results were surprising.

Most plastic bottles are made of PET, or **polyethylene terephthalate**. In the EU, 2.3 million tonnes of bottles were produced in 2005; only a third of them were recycled.

It is transformed locally

Plastic bottles are recycled into a wide variety of products: polar fleece clothing, stuffed toys, plastic sheets, carpeting and new bottles.

It can be put in a recycling bin... Sweden and Germany give refunds to people who bring their empty bottles back.

Or returned to the supermarket... Sweden and Germany give refunds to people who bring their empty bottles back.

Or picked up and sold The homeless in Los Angeles can sell plastic bottles to a recycling centre for 65¢ a pound.

then it goes to a sorting centre Plastic bottles are sorted out by colour and baled.

Or shipped to Asia China buys plastic waste from London and Los Angeles. Britain also ships plastic waste to India and South Korea.

If it goes into the regular garbage...

IT CAN BE DUMPED IN A LANDFILL...

Sweden has turned its landfills into shoe shops.

or taken to an incinerator...

The solid residue is turned into road paving materials.

Noxious gases are filtered before release into the atmosphere.

And turned into electricity

Heat generated when trash is burned is converted to steam for heating and to electricity for national grids.

SHANE WELSH/REUTERS

Why recycle? It is costly, time-consuming and takes more effort than simply chucking all the waste into a single bin. Nonetheless, over the last two decades, recycling has become the norm in the Western world.

Citizens pay higher taxes to cover the costs; municipalities enforce

recycling regulations and refuse to pick up the garbage of households that do not comply.

Some people complain, but others get angry when they cannot apply what they see as eco- friendly solutions to problems like an overabundance of trash.

In Britain, the 2,11,000 members of the Women's Institute, a respected civic group, staged a revolt last June, saving up food packaging for a week and taking it back to supermarkets around the country.

Even in France, where recycling got off to a slower start than in pioneering places like Germany and California, people have now come to accept it. "A few years ago we had a hard time making people understand the need for recycling," said Reynald Gilleron, chief of sanitation for Paris's wealthy 16th district.

"Now, given the importance that ecology and sustainable development have taken on in political life, it's become a no-brainer.

There has been a collective wakeup call." For one thing, various cities in Europe and the United States send their sorted waste to Asia for recycling, and one major buyer — China — may be having second thoughts.

Last month, the Chinese authorities ordered an investigation into reports that Britain, which ships paper and plastic to China, had sent harmful waste to Guangdong Province.

Some Westerners, too, are troubled by the notion of sending their garbage abroad and wonder whether Asia has sufficient safeguards to recycle used materials without creating risks to health or the environment.

There is also the question of what will happen when Asian manufacturing powerhouses like India and China begin to produce even a fraction of the trash produced in the West.

Sceptics question recycling's cost-benefit relationship. If it costs less to bury trash in a landfill, they say, why sort and reprocess it? Wouldn't it be better to use the savings on other environment-friendly projects?

Proponents answer that recycling helps conserve natural resources and also reduces the [greenhouse gas](#) emissions held responsible for climate change because less energy is needed to transform goods than to obtain raw materials and manufacture new products.

A deeper issue is how to create less waste. According to Gilleron, a new collective wake- up call is in order. "We need to reduce the amount of trash we make," he said. This, in turn, would cut back on the need for recycling.

As for the actual process, the International Herald Tribune newspaper decided to board garbage trucks in seven cities to see firsthand what happens once people stash their trash in a recycling bin. What emerges is a global work in progress.