

San Francisco, ‘the Silicon Valley of Recycling’

By [MATT RICHTEL](#) MARCH 25, 2016



Workers inspecting a bale of refuse at the Recology recycling plant in San Francisco. Foreign officials and others often visit the facility for ideas on how to handle their own mushrooming piles of garbage. Credit Josh Haner/The New York Times

SAN FRANCISCO — Robert Reed, who is enjoying a surprising career turn as a busy tour guide at the latest hot spot here, stood smiling one recent sunny morning before 10 foreign dignitaries and journalists. They included the mayor of Genoa, Italy, and the general consuls from Italy, Canada and Switzerland.

Each visitor wore a sport coat and tie, and a yellow safety vest to ensure they wouldn't be run down by garbage trucks.

"It's always nice to meet new friends from around the world," Mr. Reed said in his introduction, beaming. "In fact, we've had visitors from 58 countries." Behind him stood a warehouse filled with a 630-ton mountain of refuse being pecked by sea gulls. "Come on," Mr. Reed continued, "I'll show you the bottles, cans and paper."

You won't find [San Francisco's Pier 96](#) in any travel guidebook but it has become a must-see destination for visitors from Afghanistan to Vietnam. They've come to explore [Recology](#) — Mr. Reed is a spokesman — one of

the world's most advanced recycling plants, a deafening, Rube Goldberg system of conveyor belts and sorters that, with the help of human hands, untangles a 30-foot hill of debris collected by trucks every day from across the city.

"It's like a modern art installation," marveled Mauro Battocchi, the Italian consul general here. "So fabulous — the people and machines and objects of our lives all working together."

Foreign officials and others come here to pick up tips on how to handle their own mushrooming piles of garbage back home. As the world's population grows, people are consuming more, creating more trash, and countries are looking for ways to deal with it that put less stress on the environment.

Many are part of a growing movement sometimes called [Zero Waste](#) or the [Circular Economy](#). It entails trying to eliminate tough-to-recycle items like flimsy plastic bags and also pioneering new ways to recycle or compost everything else. Often, cities around the world have led

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the way, including Portland, Ore.; Seattle; and Milan, as well as the Basque region in Spain. That has given rise to a trash tourism circuit.

Recycling sites “don’t have to market themselves,” said Jessica Morrison, an environmental policy analyst for the [Fraser Valley Regional District](#) in British Columbia, who helped organize a tour in 2014 for a dozen officials to

visit a recycling plant in Montgomery, Ala. “People like us are knocking down the doors.”

And the interest remains despite [strained recycling economics](#) caused by falling oil prices. That has driven down the cost of new commodities, like plastic, and, in turn, the price of recycled materials sorted and sold by companies like Recology.



Marco Doria, left, the mayor of Genoa, Italy, with Robert Reed of Recology during a tour of the recycling plant last month. Credit Josh Haner/The New York Times

More broadly, skeptics contend that the energy and other resource costs required to recycle some items are not worth the investment. But the visitors to Recology tend to be among the converted, who believe that incineration and landfilling carry their own devastating, long-term ecological costs.

Recology, a private company, gets most of its operating budget from the monthly fee of \$35.18 it charges each household for residential trash, recycling and compost.

Mr. Reed says the Recology operation is cost effective, at least by one measure: San Franciscans pay the same amount or less than residents of other Bay Area big cities do for curbside pickup, but they compost or recycle a greater percentage of their garbage.

This success is partly why San Francisco’s plant has achieved something approaching celebrity status, with numerous write-ups, including a big spread [in France’s Le Monde newspaper](#); visits from some 50 film crews, mostly for television; and roles in two major movies: the 2012 documentary “[Trashed](#),” featuring the British actor

Jeremy Irons, and the popular new French documentary “[Demain](#),” about solutions to global problems.

San Francisco has become a recycling model for some cities, including Paris. The city’s deputy mayor, Mao Peninou, visited in October 2014 and said Recology’s composting now serves as a proof-of-concept for new Parisian efforts along the same lines.

Recology continues to draw visitors even though it is “not state of the art,” said Jack Macy, the Zero Waste coordinator for San Francisco. He acknowledged that other places have pulled ahead with newer technology, and noted that San Francisco itself originally drew inspiration from Germany, which was recycling and beginning to compost in the 1980s.

Today, San Francisco diverts around 80 percent of waste away from landfills, putting it among the elite recycling cities. (And Recology plans to spend \$11 million to upgrade its facility in the next year to deal with [more packaging from online shopping](#).)

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San Francisco also has a world-class reputation for its composting processes, which turns food waste into fine, coffee-like grounds that is sent to farms as fertilizer.

The Recology tour starts at Pier 96, an industrial hub at the city's southern edge, inside the doors of a cavernous, 200,000-square-foot warehouse.

The first step is the separation of all recyclable garbage, with tractors scooping up piles and pouring them onto five conveyor belts. It travels up to the first culling level, where human "classifiers" wearing masks, gloves and aprons pull out the biggest pieces of cardboard and drop them down chutes where they are baled.

A few feet later, everything else bustles up a fast-moving moving ladder that carries the lighter paper to the top, while heavier cans and bottles fall back down. The bottles and cans are then divided.

Farther along, an optical sorter uses a beam of light to determine which plastic bottles are clear and which ones are colored. The clear ones are flipped off the belt by puffs of air.

"It's Willy Wonka's everything-you-can-imagine recycling place," Mr. Reed said during the recent tour. The former freelance reporter for The San Francisco Chronicle loves talking about recycling and composting so much that it is as enjoyable "as a woman asking if she can give me a back rub," he says.

[Where Does Your Recycling Go? | Bay Curious, KQED News Video by KQED News](#)

Mr. Reed likes to explain that Recology is a private, employee-owned company that has created around 210 jobs, most of them drawn from Bayview-Hunters Point, one of the city's poorest neighborhoods, where the plant is.

"It's the Silicon Valley of recycling," said Christian Forthomme, chief executive of RealChange, a Bay Area-based consulting firm that brings foreign executives and officials to visit Silicon Valley, including four delegations to Recology in the past six years.

One group included Bruno Hug de Larauze, president of the Chamber of Commerce in Brittany, France, who likens Recology to an Uber or Airbnb for waste that shows how technology and capitalism can change the world. Plus, the place is just impressive, Mr. de Larauze said.

"It was the wow effect. It was incredible," he said of his first visit (he's been twice), and added with a laugh, "It smelled, let me be frank."

After the tour with Genoa's mayor and the consuls general, Mr. Reed organized a lunch of salad with French and Italian cheeses. As they sat down to eat, Mr. Reed raised the possibility of another destination for the group.

"I hope you'll get a chance to visit our composting facility," he told the dignitaries. "But we probably don't want to talk about that while you're eating."

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