

# New York has designs on waste

It wants to be more efficient – from the time residents throw out their trash to when the city trucks pick it up

**New York**  
AN APARTMENT building's trash disposal system is seldom on its amenities list. Nor are prospective buyers or renters likely to ask about things like garbage or recycling methods.

But an exhibition on Zero Waste Design Guidelines called *Designing Waste: Strategies for a Zero Waste City*, on display till Sept 1 at the Center for Architecture, is about precisely that: the varied and often messy ways that New Yorkers deal with their trash and recycling.

The guidelines – and the exhibit – are meant to get residents, landlords, building owners, architects and developers focused on the effort to reduce waste and increase recycling. The guidelines were developed by American Institute of Architects New York; Kiss + Cathcart, Architects; ClosedLoops; and Foodprint Group; with support from the Rockefeller Foundation.

"There are a bunch of steps that have to happen before waste rolls away," said Andrew Blum, curator of the exhibition. "At each of those steps, there's some kind of design moment, whether it's the chute room in a building, the sorter in a restaurant or office, the person bagging and sorting the waste and if they have room to do it properly, and bringing it out to the curb while making sure it's separated."

The hope is that focusing on each of these design moments will make for more efficient handling and sorting of waste, from the time residents throw out their trash to when the city picks it up.

Some New York City buildings already have inventive solutions, such as the Harlem condo that provides valet composting service or the box breakdown station in Stuyvesant Town-Peter Cooper Village in Manhattan, commonly known as Stuy Town, that makes it easier for residents to collapse their cardboard

boxes. Under the city's OneNYC plan, New York aims to reduce the amount of refuse collected by the Department of Sanitation by 90 per cent by 2030, from a 2005 baseline.

The challenge is clear: "We only capture 50 per cent of the recyclables," said Bridget Anderson, deputy commissioner for recycling and sustainability at the Department of Sanitation.

"A large part of why we don't capture more of the recycling is design and the fact that it's not convenient to recycle in many buildings."

Of the roughly 12,000 tonnes of trash the sanitation department collects every day from homes and institutions (commercial waste is collected by private haulers), only about 2,000 are diverted for recycling.

A small amount of organic material suitable for composting – 100 tonnes or so – is also diverted from landfills, although organic material represents about a third of all waste collected by the city. The rest is treated as refuse.

In search of best practices, the authors of the design guidelines followed the waste trail through more than 40 buildings, from the service corridors of prewar co-ops to the triple chutes (for refuse; paper; and metal, glass and plastic) of newer towers.

"It was eye-opening," said Clare Mifflin, one of the authors, who worked at Kiss + Cathcart when the guidelines were developed and now runs the design consulting company Woven.

They found trash rooms bursting with cardboard, elevators and exits blocked by bags of recycling, trash chutes with pest problems, circuitous routes from trash storage to curb, sidewalks piled with mountains of garbage bags and ad hoc procedures that created friction at every turn. Because the flow of waste is often treated as a low-priority item in



The exhibition *Designing Waste: Strategies for a Zero Waste City* at the Center for Architecture in New York, focuses on the varied and often messy ways that New Yorkers deal with their trash and recycling.

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the design of new buildings and older buildings were never constructed to handle recycling, building employees are often left to figure things out for themselves. Nevertheless, the authors found shining examples buried in the muck.

"In places where they have thought about waste, it's inspiring," Ms Mifflin said. "In some buildings, there's amazing creativity at every level."

One of those places is Strivers Gardens, a 170-unit condominium at 300 W, 135th Street, built in 2005, where Martin Robertson, the facilities manager, hopes to make waste disposal as painless as possible for residents, while maximising participation in recycling.

After arriving at the building in 2013 and with the support of the board, Mr Robertson introduced textile and electronic waste recycling containers in the basement in 2015, and an organics collection programme in 2016.

At Stuy Town, building employees have experimented with various methods of encouraging the development's approximately 30,000 residents to recycle more, under the leadership of Rei Moya, the resident manager.

To encourage residents to use an organics collection programme that was started in 2016, the development gives residents individual countertop compost bins with compostable bags that can be dropped in sanitation de-

partment collection bins in the basement recycling centre of each building. (The buckets and bags are distributed free at the Stuy Town Greenmarket on Sundays.) "We learnt that you have to make it convenient and easy," said Steven Gregware, the director of environmental services, who estimated that Stuy Town now diverts about 20 per cent of its organic waste, or about 5 tonnes a week, from refuse.

When cardboard began to overwhelm Stuy Town's recycling centres, a porter created a prototypical box breakdown station that allowed residents to process their cardboard, a solution that will soon be rolled out in other buildings. A number of the city's largest developers, including

Vornado Realty Trust, Related and the Durst Organization, have also been working to make recycling and organics collection a more integral part of the way their buildings are run.

"If you are suddenly feeling guilty about that time you tossed recyclable material in the trash because you could not find a recycling bin, do not fret: The system, or lack thereof, may be partially to blame.

"You're not a bad person – that's just the nature of how humans behave," said Ms Anderson of the sanitation department. "We want to find ways of designing buildings and spaces that make it as convenient, if not more convenient, to divert the useful parts of the waste stream."

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