



# ONE BIN FOR ALL

RECYCLING REIMAGINED IN HOUSTON

## FREQUENTLY ASKED QUESTIONS

### HOW IS IT DIFFERENT FROM TRADITIONAL RECYCLING?

One Bin For All is the next evolution of recycling. It would allow Houston residents to place all trash, recyclables, and compostables in one bin, providing for a much higher rate of resource recovery. One Bin For All is different from the City's current single-stream recycling program, which allows residents to commingle paper, plastics, glass, and metals into a 96-gallon bin and place non-recyclable trash into another bin.

### WHAT'S HAPPENING WITH SINGLE-STREAM RECYCLING?

This program was expanded to 70 percent of Houston households in April 2014. The City is committed to providing single-stream recycling to the remaining 30 percent of Houston households by Spring 2015.

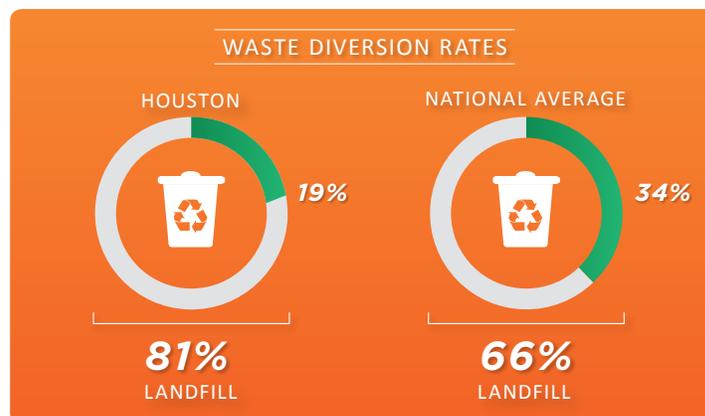
### WHAT IS THE TIMELINE FOR ONE BIN FOR ALL?

In 2013, the City issued a Request for Qualifications (RFQ) from vendors who might provide One Bin For All services. Eleven responses were received, and an evaluation committee narrowed the pool to six qualified vendors. In July 2014, these vendors responded to the Request for Proposals and those proposals are currently under review by the evaluation committee. If the committee decides a vendor can provide the services to make One Bin for All successful, a recommendation may be offered during the First Quarter of 2015. The City is committed to finding and using only those technologies that offer a positive impact on the environment, community and the City's financial future. If the City is not able to accomplish those goals with One Bin For All, the City will continue its commitment to traditional single-stream recycling.

### WHY ONE BIN FOR ALL?

Houston's waste diversion rate is currently 19 percent, meaning 81 percent of our waste ends up in landfills. Of the 19 percent of waste that is diverted from landfills, only 6 percent comes from recycling, and 13 percent is due to the City's mandatory yard waste compostable bag program. Meanwhile, expansion and education have been challenging because the City has no dedicated fee for residential solid waste services.

But Houston can do better. That's why in 2013 we dedicated part of the City's budget to expanding our single-stream recycling program while we explore options concerning One Bin For All. Even nationally, only 34 percent of the waste stream is recycled – a rate that has stagnated since the 1990s. It's time to explore new ways to recover assets from the waste stream that do not involve relying on the consumer to separate recyclables from trash. The City has a vision for leveraging Houston's legacy of innovation and exploration to change the way the world thinks about recycling and our waste stream. Whether we adopt One Bin For All or stay with an expanded traditional recycling program, it is critical for all Houstonians to commit to waste minimization – for the environment, our financial future, and our quality of life.



# DISPELLING THE MYTHS

## **“THIS IS JUST A ‘DIRTY MRF.’”**

The One Bin For All concept could change the way we view a typical MRF- “clean” or “dirty” — and if deemed feasible, could be the first total materials recovery facility in a major U.S. city, pioneering the next generation of processing systems.

Unfortunately, the terms “clean” and “dirty” MRF have become part of the waste industry’s vernacular. A “clean” MRF accepts and processes recyclables that have already been separated from trash. A “dirty” MRF refers to a facility that separates trash from recyclables. It’s true that early designs for dirty MRFs failed to properly process commingled trash and recyclables. But today, these facilities can recover more recyclables than a “clean” MRF. One of Houston’s goals is with the adoption and replication of One Bin For All, the term “dirty MRF” would become a phrase of the past.

## **“WHAT ABOUT CONTAMINATION? PERFECTLY GOOD RECYCLABLES LIKE PAPER WILL BE RUINED WHEN MIXED WITH TRASH AND ONLY INCREASE LANDFILLING.”**

One of the goals of One Bin For All is that much more material could be recycled than with single-stream recycling because the City would have access to all recycled material (not only what is put in the recycling bin) and technology would be used to more accurately process and separate larger quantities of material. That material would otherwise go to landfills. One Bin For All would feature technologies that allow for better sorting of mixed materials. Food waste and small pieces (even bits of broken glass) could be removed from the mixed waste early in the sorting process, allowing more material to be recycled. It’s true some paper will become contaminated in the process, but the technology could convert it to energy.

## **“THIS IS REALLY INCINERATION IN DISGUISE.”**

The City of Houston does not and will never burn trash. As stated in the RFQ for the private-sector processing partner, “technologies that rely on incineration or require combustion will not be evaluated.” Not only do EPA regulations for Houston’s air quality prohibit the burning or incineration of trash, the City will not implement any technologies that increase greenhouse gas emissions or are otherwise bad for the environment or Houston’s neighborhoods.

The City is interested in mixed waste processing coupled with these technologies: anaerobic digestion, gasification or catalytic conversion (to create a gaseous or liquid fuel), and composting. These technologies could convert materials that can’t be recovered for recycling into electricity, natural gas, biodiesel, or gasoline. While incineration burns waste and produces mass amounts of ash and air emissions,

thermal and catalytic conversion technologies use a closed container to break down trash into a synthetic gas that can be converted to fuel. While the approach is not entirely carbon-neutral (because some heat may be needed to process the trash), it diverts waste that can’t be recycled from having to be landfilled. That means fewer greenhouse gas emissions from methane in the air. Additionally, the One Bin For All concept could eliminate the need to collect trash and recyclables separately. If feasible, we could reduce ozone pollutants through an estimated 5,000 fewer truck trips and 600,000 fewer vehicle miles traveled on our roads every year.

## **“LOCATING THIS FACILITY AT AN EXISTING LANDFILL WILL CREATE HARDSHIPS ON LOW-INCOME RESIDENTS WHO LIVE NEARBY.”**

The City of Houston will not implement a program that would harm any citizens. If presented with a feasible One Bin For All proposal, the City would work with vendors and neighborhoods to ensure accurate information and updates are shared proactively. The proposed facility would likely be located at or near an existing landfill. Less waste will go into the landfill, which means there could be lower methane emissions. Additionally, a visitor education center would be located at the proposed facility. That means school children and community leaders can take ownership of the program, and all Houstonians could feel a sense of pride from participating in One Bin For All. Also, the City of Houston can require that a portion of the new jobs that are created to build and operate this facility be filled by people from the neighboring communities.

## **“THIS PROGRAM ABANDONS ZERO-WASTE GOALS AND SINGLE-STREAM RECYCLING, AND TAKES AWAY CONSUMER RESPONSIBILITY.”**

The current national municipal solid waste diversion rate has stagnated at about one-third since the 1990s (EPA: currently 34.7 percent), and many of the nation’s largest cities struggle to top 30 percent – even with zero-waste plans and pay-as-you-throw rate schedules that give consumers a financial incentive to recycle all they can. It’s time to go beyond single-stream recycling and summon the political will to explore large-scale change.

If feasible, the City estimates One Bin For All could help Houston divert 55 percent to 75 percent of its waste. While considering the One Bin For All program, the City is currently expanding its single-stream curbside recycling program to 100 percent of households. And as part of the current zero-waste efforts, the City will launch an education campaign to encourage and incent residents to reduce and reuse.