

#### FOR CEU'S

- 1. PULL DOWN THE PREFERENCES.
- 2. CHECK THE 'REMEMBER' BOX.
- 3. WE NEED YOUR EMAIL TO SEND CERTIFICATE.
- 4. PLACE "CEU" OR
  YOUR AIA MEMBER
  NUMBER (FOR AIA
  UPLOAD) AFTER
  YOUR NAME.



#### **EARTH DAY & RECYCLING**

STEVE STELZER, AIA, LEED AP, ICC CSP HOUSTON PERMITTING CENTER CITY OF HOUSTON GREEN BUILDING RESOURCE CENTER





#### **BEFORE WE GET STARTED**

#### PRESS RELEASES

City Launches Houston's First-Ever Climate Action Plan on 50th Anniversary of Earth Day

April 22, 2020 -- In honor of the 50th anniversary of Earth Day, Mayor Sylvester Turner and the City of Houston's Office of Sustainability today released the Houston Climate Action Plan, a science-based, community-driven strategy for the City of Houston to reduce greenhouse gas (ghg) emissions, meet the Paris Agreement goal of carbon neutrality by 2050, and lead a global energy transition. Download the Houston Climate Action Plan at <a href="https://www.greenhoustontx.gov">www.greenhoustontx.gov</a>.

"I am proud to introduce the city of Houston's first Climate Action Plan. These are difficult and challenging times, but this is a historic moment for the City of Houston," said Mayor Turner. "While we are currently forced to change the way we physically do business, our work must go on. We must deal with the challenges facing us today and prepare for those facing us tomorrow. No other city is better suited to tackle climate change than Houston. That's why we chose today – the 50th Anniversary of Earth Day – to release our Climate Action Plan and let everyone know that although it seems like every aspect of our lives has changed, we are more committed than ever to building a more sustainable and resilient Houston."





!L! HOUSTON

HAPPY EARTH DAY

#### VIRTUAL VIEW OF EARTH

Ha! the first ZOOM webinar back in the sixties With old school cameras and televisions A different perspective than we were used to





!L! HOUSTON

THIS IS WHAT I'M TALKING ABOUT

USE RESOURCES below a level that our planet can provide in perpetuity.

**EMIT WASTES** below the level that our planet can safely absorb in perpetuity.



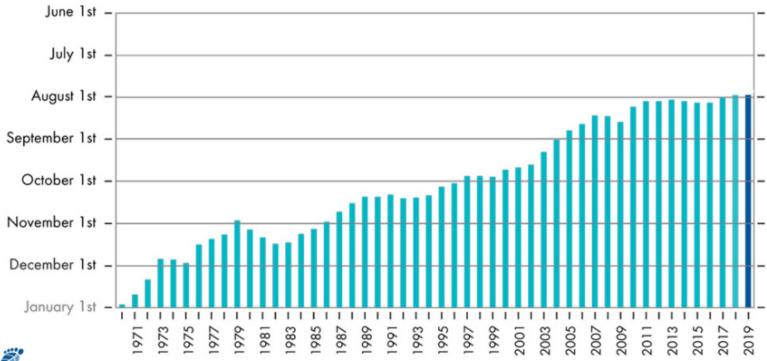


#### PAST EARTH OVERSHOOT DAYS



Earth Overshoot Day 1970-2019







Source: Global Footprint Network National Footprint Accounts 2019





!L! HOUSTON

THAT'S NOT SUSTAINABLE.



#### **THAT'S NOT SUSTAINABLE**





## WHY DO WE KEEP DOING THIS?



# WHAT IF

## We quit trashing so much?







#### IS THERE SOME WAY

to influence these extractors & manufacturers to clean up their acts?



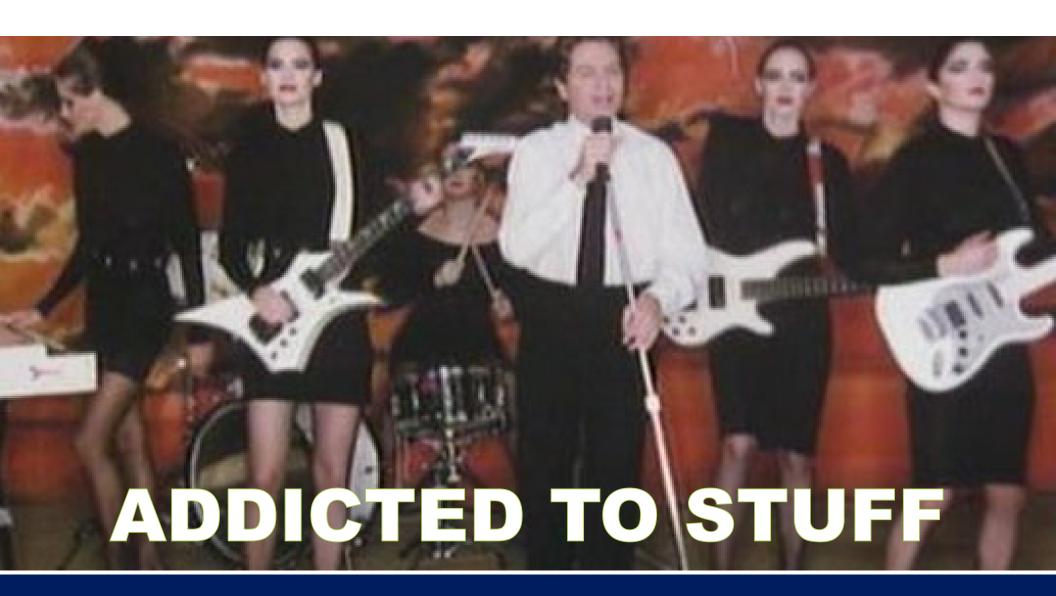


#### **WE REALLY WANT**

our lifestyle to be sustainable.

But we're going to have to face it, we're



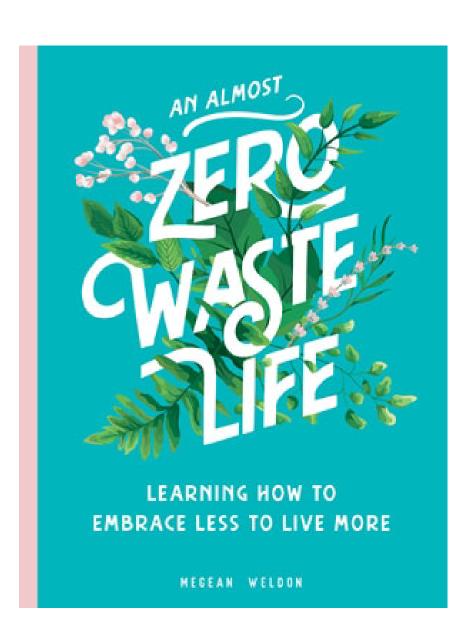




#### **ZOOM IN**

# WHAT IS YOUR WASTE FOOTPRINT?

WHAT CAN YOU DO TO STOP WASTING SO MUCH?



# ZERO WASTE FB GROUP

JOURNEY TO ZERO-WASTE A community of great ideas...

Group by Do It Different #DID and Zero-Waste Journey to Zero-Waste > PRIVATE GROUP · 115,992 MEMBERS + Invite

Q Search in Journey to Zero-Waste

#### **ZOOM OUT**

# WHAT IS AMERICA'S WASTE FOOTPRINT?





# Subscribe to Waste Dive

Get the top waste & recycling industry news delivered straight to your inbox.

Waste Dive

view sample | Daily

Topics covered: recycling, landfills, collections, organics diversion, waste-toenergy, and much more.

Waste Dive: Recycling

Weekly

Topics covered: recyclables collection, MRF operations, processing,
commodity trends, global trade policy and more.

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Enter your work email

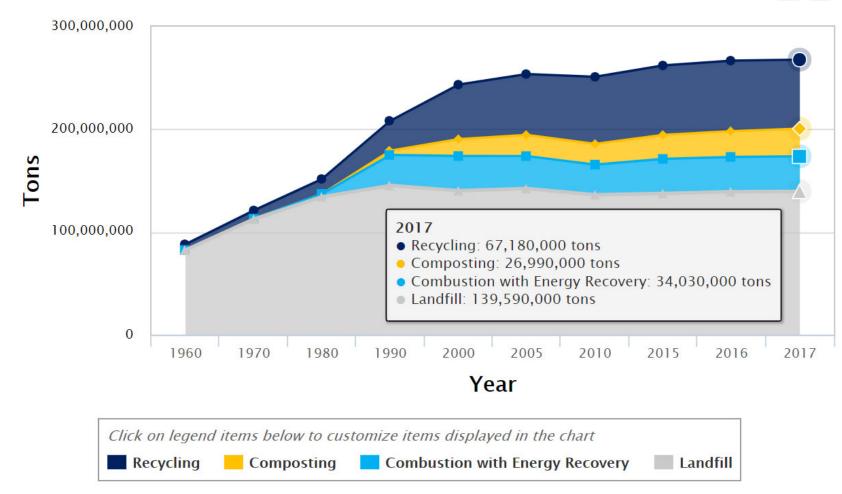




Sign up

#### **EPA REPORT OF U.S.** Municipal Solid Waste Management: 1960–2017





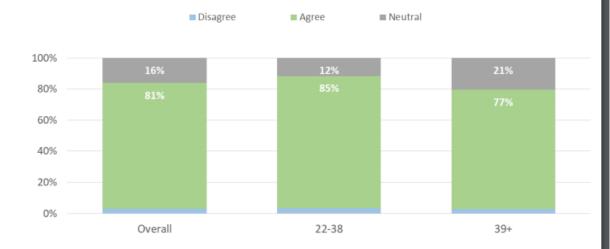


### Consumers Want to Create Less Waste

#### ARE LOOKING FOR WAYS TO CREATE LESS WASTE

81%
Of consumers want to find

ways to create less waste.



Question: To what extent do you agree or disagree with the following statement: 'I want to find ways to create less waste.'



# **OF COURSE!**

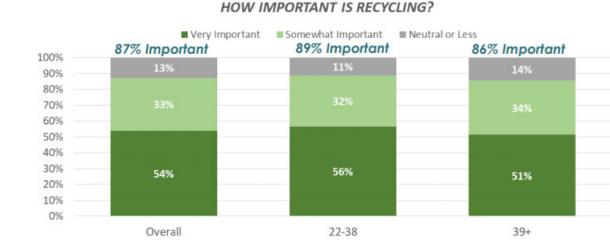
UNLESS IT TAKES EFFORT.





# Consumers Feel Recycling is Important

87%
Feel recycling is important.



Question: How important is it to you to recycle?

Answered Very Important, Important, Neutral, Not Very Important, Not Important at All



## OF COURSE!

#### THE ALTERNATIVES ARE A PAIN...

REDUCE AND REUSE – HOW ARE THEY DOING?

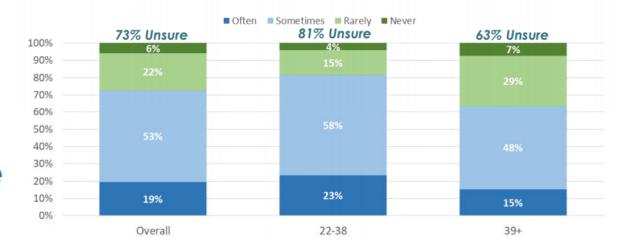




# Majority of Consumers Lack Clarity on What is Recyclable

73%

Are unsure about what is recyclable. Millennials are most unsure.



HOW UNSURE ARE YOU ABOUT WHAT IS RECYCLABLE?

Question: How often are you unsure about what items are recyclable?



# WHY IS THIS?

IT'S SOMEWHAT CONFUSING, BUT IT'S NOT ROCKET SCIENCE.



#### **EDUCATION**

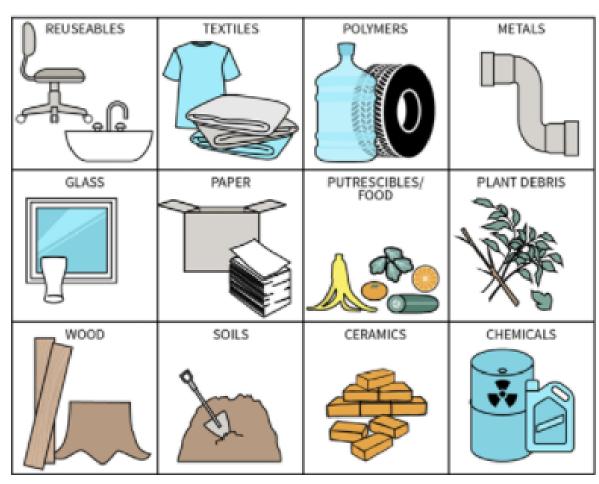
Is there some reason why high school graduates do not fully understand what *is* recyclable and what *isn't*?





To understand generation of every commodity or waste at the facility and how these materials are processed.





# **EDUCATION LAPSE**

Trash goes here





Recycling goes here. Not trash.

# QUESTION: WHAT'S THIS?

# ANSWER: IT DEPENDS.

A lone container in America is a trash can.





#### **VAGUENESS ABOUNDS**

INDUSTRY WANTS YOU TO CONSUME. THEY DON'T WANT YOU TO BE EDUCATED.

IF YOU WERE YOU MIGHT NOT CONSUME SO MUCH.

OR YOU MIGHT HOLD INDUSTRY ACCOUNTABLE.



# RECYCLING CONFUSION METER





#### **CONSUMER RECYCLING**

Can you imagine?

#### Recycling around the world









#### Recycling in Switzerland

































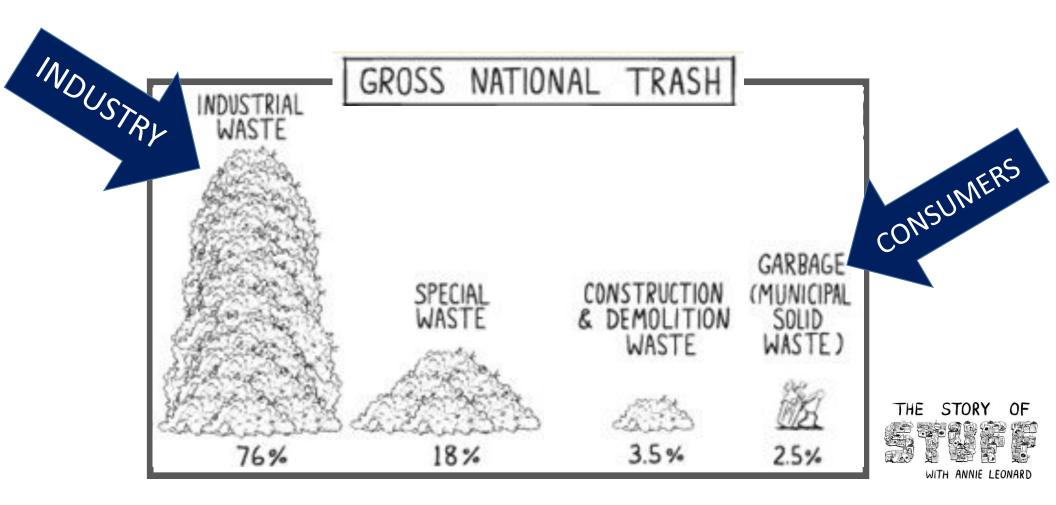








# THE PROBLEM



### THE "WASTEBERG"

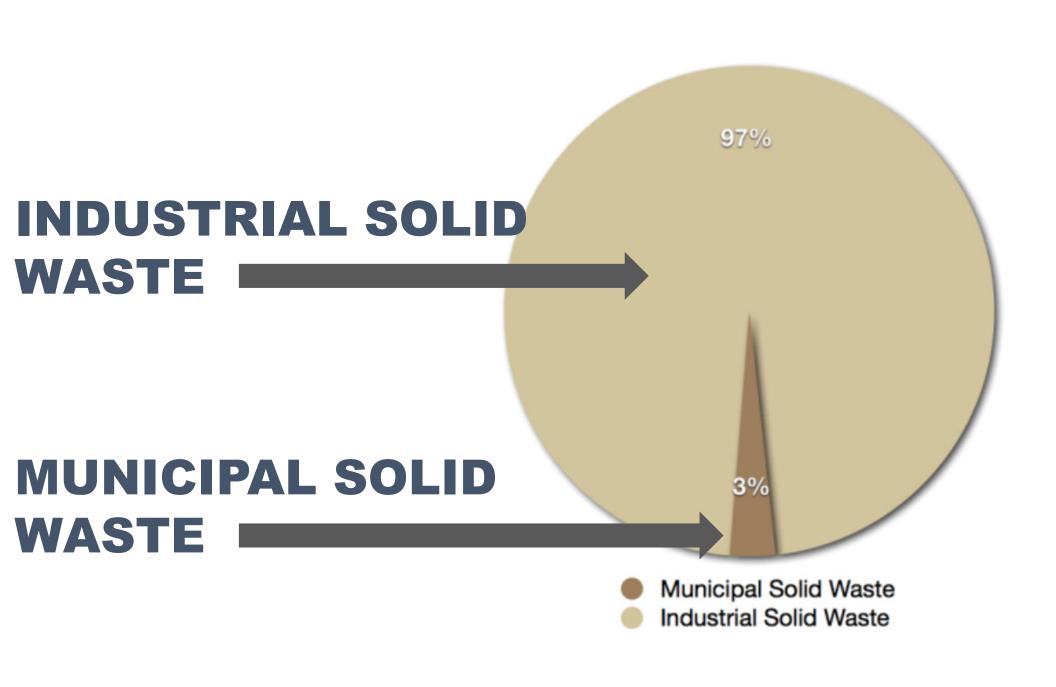
**5-10**% of all materials purchased by typical companies go to produce the product.



90-95% is wasted.

Materials associated with extraction, transportation, processing and other activities.

Businesses often externalize the cost of their generated waste and pass it on to the consumer and municipalities.



### **DISCLOSURE**

According to the source article, this percentage is controversial, based on EPA data research.

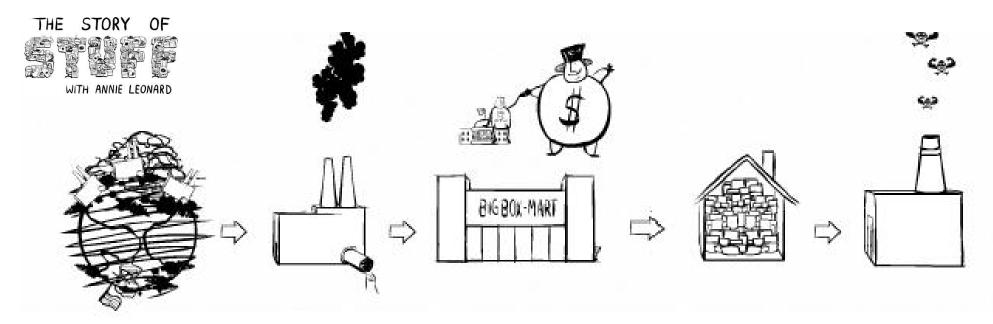
Perhaps it's not that huge of a contrast?

80/20 instead of 97/3? That would still be crushing.





# THE LINEAR ECONOMY



Extraction Production Distribution Consumption Disposal

97%←—ISW

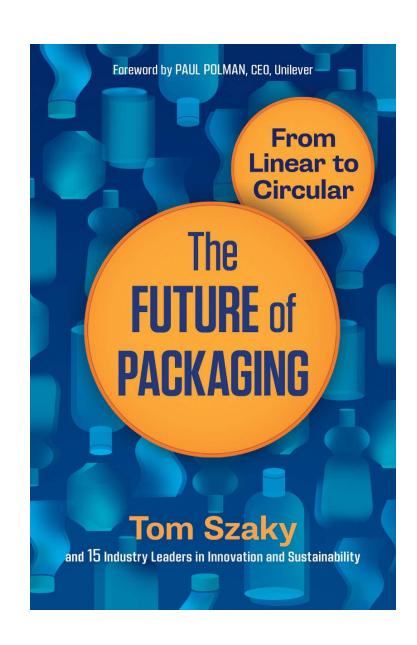
MSW ---->

**Downstream direction** 

# TIME OUT

# PACKAGING IS 40% OF MSW!







Coffee Packaging (11.5 oz product)	Recyclable postconsumer?	Energy Consumption (MJ/11.5 oz.)	CO2 eq Emissions (lbs/11.5 oz)	MSW Waste Generated (lbs./ 100,000 oz. of product)
CLASSIC SECTION OF THE PROPERTY OF THE PROPERT	Steel can – yes Plastic lid – no	4.21	0.33	1,305
Character and Ch	Plastic container – yes Plastic lid - no	5.18	0.17	847
BICK, FIRE TASTS  BACK  BICK, FIRE TASTS  BACK	Flexible pouch - no	1.14	0.04	176



- Local trash is collected and driven to the landfill
- The landfill buries it for about \$35/ton
- Local recycling is collected and driven to the MRF.
- The MRF sorts the material for about \$95/ton, drives 25% of it to the landfill (contamination), bales the rest, and ships it off when sold.

!L! HOUSTON



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1.14

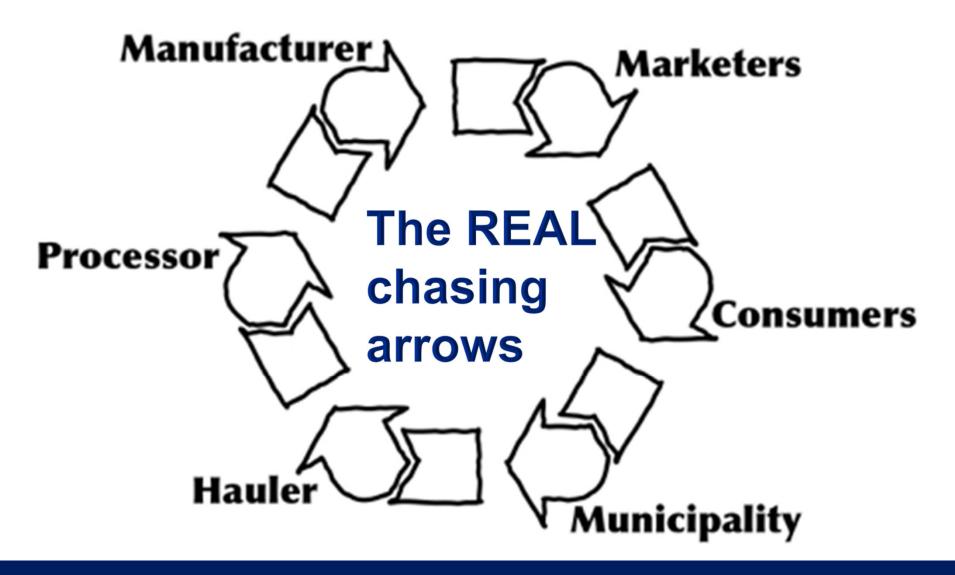
0.04

176

## NOW WE SEE

- Pouches have a smaller manufactured footpring
- ✓ Since it is not recyclable\*, the landfill buries it for about \$35/ton.
- ✓ And these pouches are virtually weightless.
- \* Of course people think pouches are recyclable





### RECYCLING IS A DISJOINTED SYSTEM

Manufacturers JUST want to make

Marketers JUST want to sell

Consumers JUST want to consume

Cities JUST want to remove waste

Haulers JUST want to haul

Processors (MRF's) JUST want to sort



### MANUFACTURERS DO NOT CARE

about the downstream issues of their products past delivery to the consumer

Okay, some do. Let's say 80/20 don't care.

Let's say they don't care ENOUGH.



### **MANUFACTURERS WANT**

the entire "hexagon" to "work together" to solve their problem.

They have not done their part.

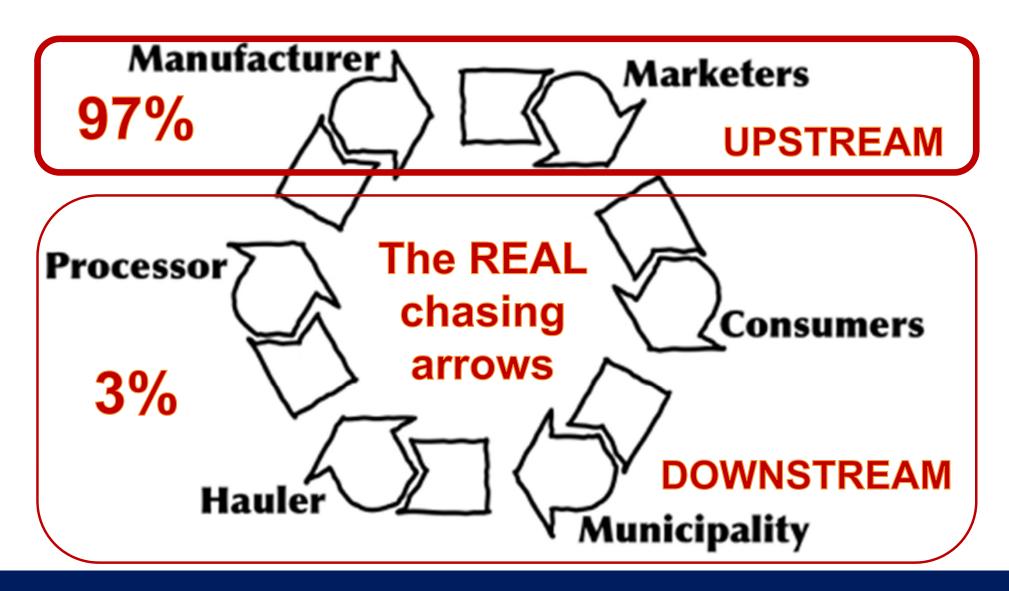
They blame the consumer.

Seriously, every other article in the blogosphere by manufacturers diverts your attention from their culpability.



# THAT. IS. THE. PROBLEM.





# DON'T LOOK FOR THE CITY OR THE HAULER OR THE PROCESSOR TO FIX THE PROBLEM.

- Cities try with things like 'Bag Bans' or mandating recycling
- Processors try by telling you not to put contaminants in the recycling bin.
- Haulers just try to get finished on time.
- The disenfranchised consumer litters and doesn't recycle.
- And this is only the 3%.



# AS LONG AS THEY KEEP SELLING

they won't fix the problem.

It's been this way for DECADES.



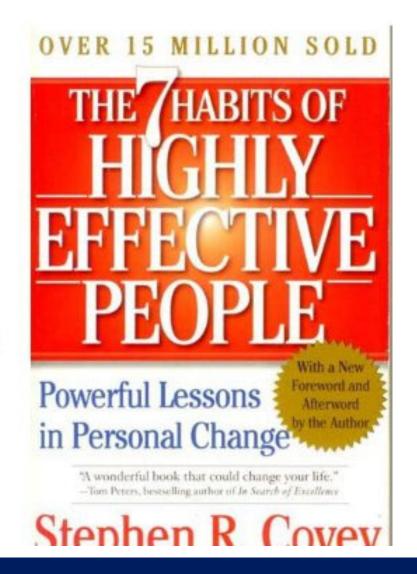
# WHAT IF SALES DROPPED?

NOW you have their attention.



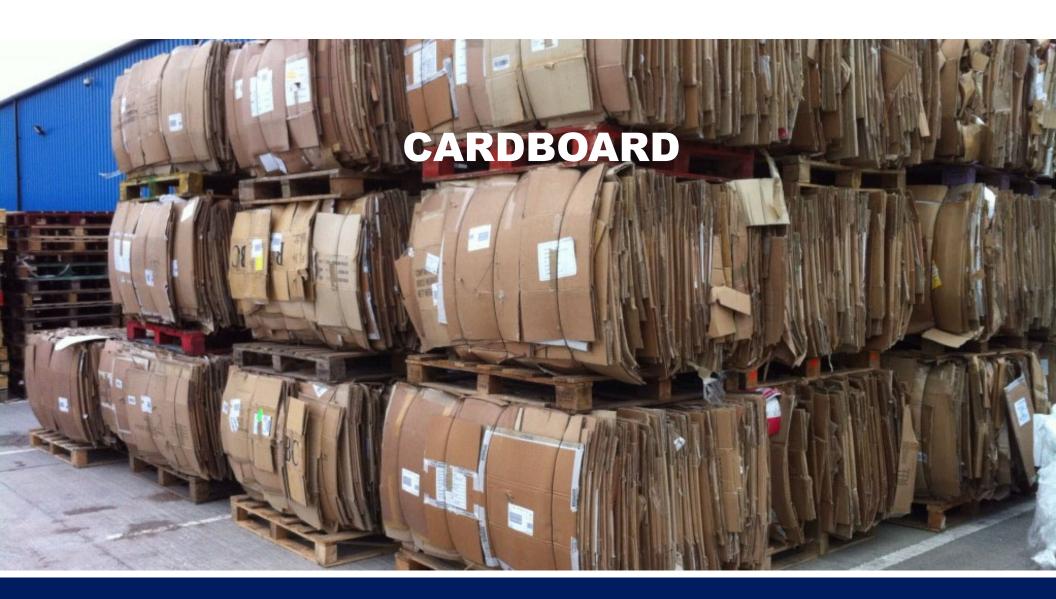
# Begin with the End in Mind

"To begin with the end in mind means to start with a clear understanding of your destination. It means to know where you are going so that you better understand where you are now and so that the steps you take are always in the right direction"







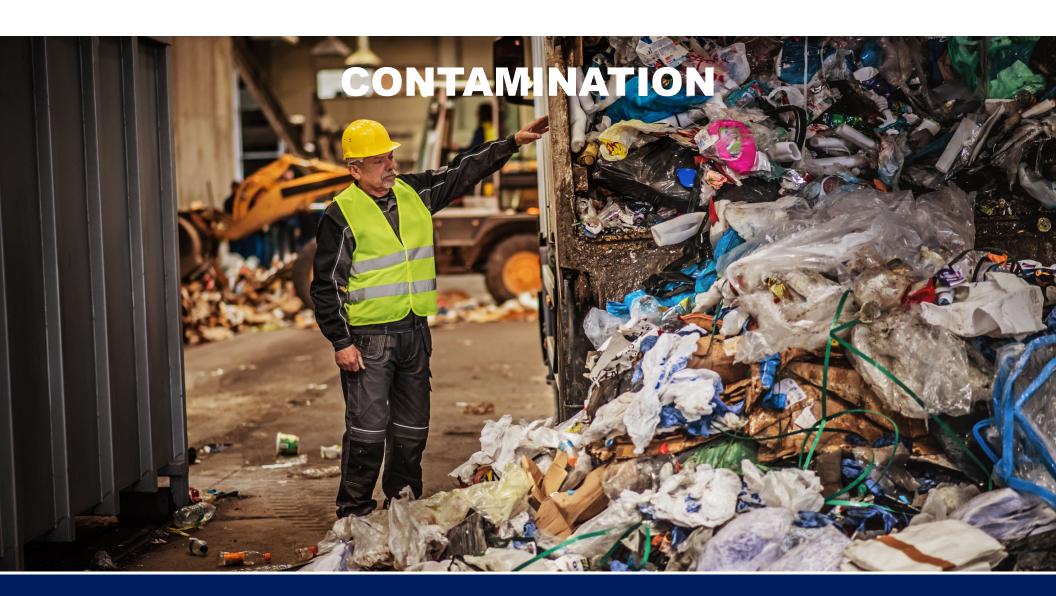














#### RESOURCE RECYCLING

Your trusted source for recycling news and analysis

Resource Recycling 

Plastics Recycling Update 

E-Scrap News 

Conferences

#### Recycled paper mill to idle due to drop in product demand

by Colin Staub



Packaging Corporation of America is a major end user of recovered paper in the U.S. | noomcpk/Shutterstock

A Packaging Corporation of America mill that uses recycled fiber will suspend operations for two months as the coronavirus pandemic keeps schools and businesses closed



demand for them," said Paul LeBlanc, vice president of Boise Paper, in the release.

The idling of the mill means a temporary layoff of roughly 340 employees, according to the company.

PCA is a major end user of recovered paper in the U.S. The company in 2019 purchased roughly 790,000 tons of recovered fiber for use in its mills, according to a company filing. PCA uses recovered fiber as a feedstock at five of its six containerboard mills and at both of the company's paper mills, including the lackson plant.

The other paper mill is located in International Falls, Minn., and PCA plans to continue operating that facility at capacity during the Jackson downtime.

A PCA containerboard mill in Wallula, Wash. <u>recently planned</u> significant new capacity for OCC processing.

A Packaging Corporation of America mill that uses recycled fiber will suspend operations for two months as the coronavirus pandemic keeps schools and businesses closed.

Packaging Corporation of America (PCA) on April 1 announced it will idle its two paper machines and the converting operation at its Jackson, Ala. mill beginning next month. The company anticipates restarting the machines in early July.

The Jackson mill produces multiple types of printing and writing paper, including office paper made from recycled fiber, under the Boise Paper brand. The mill purchases recovered fiber and pulp from multiple suppliers through contractual agreements, according to a PCA financial report.

The two months of downtime will reduce paper production by about 70,000 tons, PCA estimates. A company spokesperson declined to comment on the implications for recovered fiber use, citing a quiet period in the lead-up to the company's quarterly earnings report later this month.

In a press release, a company official cited "unprecedented market conditions" brought on by measures to combat the coronavirus, leading to a demand decrease for the mill's products.

"Due to the effects of the COVID-19 virus pandemic on paper consumption in schools, offices and businesses it's critical that we balance the supply of our Boise Paper products with our customers' demand for them," said Paul LeBlanc, vice president of Boise Paper, in the release.

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New Bottles





Buckets

(decking, docks, etc.)



Containers



Frisbees



Stadium Seats





# **SOME ENDS WE SHOULD HAVE IN MIND**

#### Why should I recycle aluminum?



For more information, please call the Trashline on 703-257-8252 or visit www.manassascity.org/trash

### The definition of zero waste

Zero waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.

Zero waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and **not burn or bury them**.



### **Fashion** Today in Focus

# Can the fashion industry ever be sustainable?



10:47

21:00 Monday, 17 February 2020

Environmental journalist Lucy Siegle has been writing week draws to a close, she discusses ways the industry Snapes on the Brit awards and its lack of female nomin



Today in Focus producer Hannah Moore discusses being backstage at the vin +



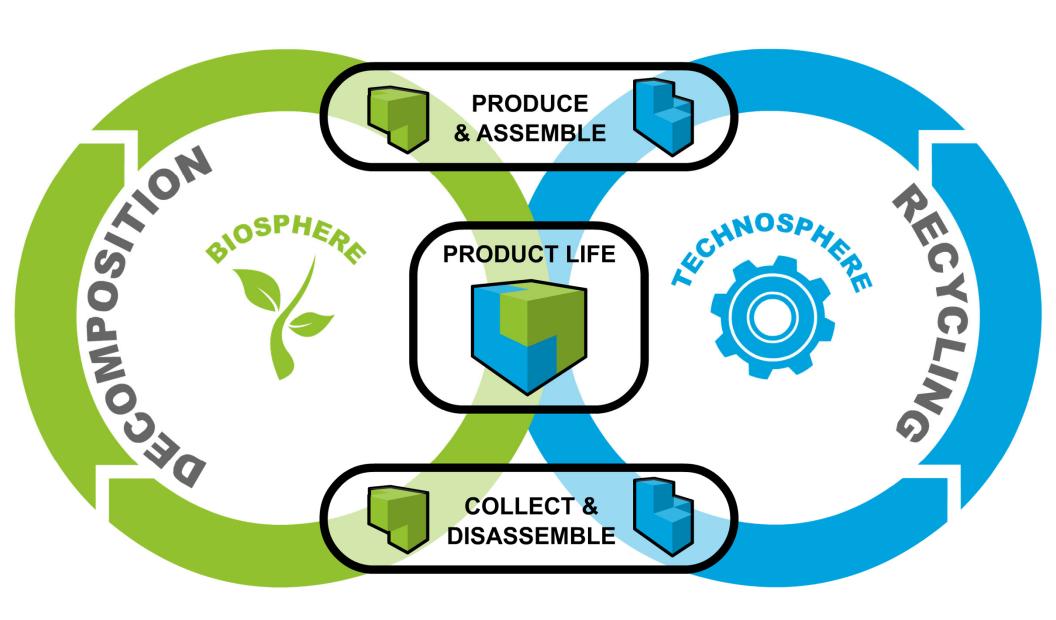
# CAN THE FASHION INDUSTRY EVER BE SUSTAINABLE?

- Clothing production has not peaked!
- Fashion industry is in probably top 5 most damaging to the environment.
- Cotton has a huge footprint, but organic is better than conventional.
- Do I know I will wear it 30 times? Over-riding factor.
- Goodwill and other clothing donation centers are your best bet.



# A ZERO WASTE STRATEGY





# circular economy



# DESIGN OUT WASTE AND POLLUTION

A circular economy reveals and designs out the negative impacts of economic activity that cause damage to human health and natural systems. These costs include: the release of greenhouse gases and hazardous



### KEEP PRODUCTS AND MATERIALS IN USE

A circular economy favours activities that preserve value in the form of energy, labour, and materials. This means designing for durability, reuse, remanufacturing, and recycling to keep products, components, and



### REGENERATE NATURAL SYSTEMS

A circular economy avoids the use of non-renewable resources where possible and preserves or enhances renewable ones, for example by returning valuable nutrients to the soil to support natural regeneration.



### **BRIGHT SPOT**

Trending....



# Adidas latest model is here: 100% recyclable shoes

SPORTS SHOES | APRIL 23, 2019



Adidas's latest endeavor tries to cut the shoe-making waste completely. Named as 'The Loop', the trainer is 'made to remade', according to the company. Every year, millions of sports shoes are sold around the globe, most of them end up as landfill or choke up the marine ecosystem as plastic waste. And it takes at least 50 years to decompose a pair of shoes completely. As environmental hazards are making serious concern, companies are inclining towards sustainable means of productions.

### Extended Producer Responsibility (EPR)

### for Packaging & Paper Products: The Basics

### Current Challenges with Packaging & Paper Recycling

Approximately, 33 percent of the municipal solid waste that is generated in the U.S. (more than 85 million tons) is composed of product packaging and paper products (or PPP). This waste stream includes plastic containers, steel and aluminum cans, plastic film, glass bottles and containers, newspaper, magazines, multi-material packages, and cardboard. According to the U.S. EPA, about 58 percent of PPP was recycled in the U.S. in 2015. While the amount of paper waste in general has declined in recent years, the amount of plastic waste is steadily growing. EPA has reported that about 15 percent of plastic packaging was recycled in 2015.

In the past year, recycling costs for municipalities have skyrocketed, driven by the loss of end-markets, and increased requirements for quality. This is a by-product of policies adopted by China that limit imports of paper and plastic. As a result, some communities that used to rely on recycling as a revenue stream are now facing significant costs, and in some instances those costs are dramatic. In a few communities, recycling programs have been suspended, or certain materials no longer accepted. Glass is the most common material to suffer this fate. A widespread phenomenon is increased education for residents about what is and what is not recyclable.



### Financing of Traditional PPP End-of-Life System Financing of EPR System for PPP Municipality/ Taxpayers/ Manufacturer/ Administrator Private Hauler Consumer Residents **Brand Owner** of EPR System Subscription Municipality/ Disposal Material MRF or Disposal Hauler Recovery Facilities (MRF) **End-Markets End-Markets**



LD 2104 ultimately creates a <u>fund</u> that reimburses municipalities for the cost of recycling and discarding single-use packaging distributed by brands. It does so by placing a fee on producers' single-use packaging which they would pay on an annual basis. These fees are based on numerous factors including:

- recyclability of materials used;
- · percentage of recycled content;
- toxicity;
- · and total weight of their sold single-use packaging.

RECYCLING REFORM
FOR MAINE

More Effective • More Sustainable • More Equitable

Maine is going to put it to the cigarette companies for all the cigarette buts polluting their common spaces.

Any remaining funds would go towards <u>education</u> around recycling and building out recycling infrastructure.

### IN THE MEANTIME:

# TRASH IS NOT ALL BAD RECYCLING IS NOT ALL GOOD MAINSTREAMING EPR IS ESSENTIAL



### **RETHINK TRASH**

In this market, everything that is not "valuable" to processors and end users is trash.

In Houston it's cheaper to **trash** trash than trying to **wish-cycle** it



### RETHINK CURBSIDE

Aluminum is very valuable, totally worth recycling
Cardboard is a commodity, worth recycling, has demand
Paper is a commodity, worth recycling, needs demand
Glass is a serious, costly problem
Plastic is insane, only 1's and 2's have value (maybe 5's)
WHEN IN DOUBT, THROW IT OUT





Paper & Cardboard
Please flatten



Metal Cans Remove aerosol tips



Plastic Bottles
& Jugs
Lids and labels accepted





**Cartons**Rinse and remove lids



Keep them loose
Don't bag items

### OTHER CITIES ARE GOING FOR PLASTIC BOTTLES ONLY



### **GLASS BREAKS**

Broken glass contaminates all the other recycled items.

But it's inert and non-toxic. Benign in the ground.

Or we could have a drop off container for glass for everyone who wants to recycle it. It needs to be out of curbside.

Houston did this for a while and everyone complained.



### **USE THESE THREE RULES TO RECYCLE RIGHT**

It's time to get back to the basics. The fact is that some recycling actions make a bigger impact than others. So please remember these three basic rules the next time you recycle.



Recycle clean bottles, cans, paper and cardboard.



Keep food and liquid out of your recycling.



No loose plastic bags and no bagged recyclables.



### KEEP THE DIRTY DOZEN OUT OF YOUR RECYCLING CART.

You have heard the saying, "one bad apple can spoil the bunch." The same goes for recycling. We need your help to keep the dirty dozen out of the recycling cart.

























Food

Plastic Bags | Food-Spiled

Paper.

Snack Baos.

& Wrappers

Cords/Wires

Gardeni. Hose

Clething

Diapers.

Broken Cups & Dishes

Electronics. & Batteries.

Household Harrianditus. Wileston

Needles

Go to RecycleOftenRecycleRight.com to learn more.





- RECYCLE ALL **BOTTLES, CANS** AND PAPER
- KEEP ITEMS 2 CLEAN AND DRY
- NO PLASTIC BAGS

### SO, WHAT ARE THE RULES?

All Rules are local.

Here's the Houston website...



Select Lan

CONTACT / SEA

SIDENTS BUSINESS VISITO

GOVERNMENT SERVICES



d Waste Management > Home



### "Working to make Houston a Cleaner, Greener Place to Live"

The Solid Waste Management Department (SWMD) provides solid waste services to the citizens of Houston to the collection, disposal and recycling of discarded material in a manner that is safe, efficient, environmentally and cost-effective.

**ID WASTE MANAGEMENT** 

ABOUT THE DIRECTOR

Ha

Harry I. Haves



Working To Make Houston A Cleaner, Greener Place To Live...
... Right In Your Neighborhood!

### Return of Curbside Glass Recycling

Mayor Sylvester Turner announced the return of curbside recycling of bottles and jar made from clear, green and brown glass.

Learn More.

Houstonians may use the depositories up to four times per month. Citizens are encouraged to arrive at least 30 minutes before closing time to allow adequate time to unload. Each user must provide the following as proof of residency:

A current Texas Driver's license (a current Texas Department of Public Safety issued I.D. may be substituted) or a Texas License to Carry and

A current utility bill or city property tax receipt. Addresses and names on all presented documents must match Texas Driver's License or ID.

**RECYCLING ONLY** - No proof of residency required.

NO PETS allowed on premises.

Residents who wish to discard TreeWaste/Junk Waste before their scheduled once-permonth pickup may use one of six neighborhood depository locations.



Tree/Junk Waste
Collection Sched

Services

Recycling

**Know Your Servi** 

News, Press and

Holiday Schedule

**Recycling Calend** 

**Business Recyclin** 

Trash Facts

Department Rule

SWMD RFCYCL

Depositories/Rec

Westpark Consur

Recycling Facilitie

Reuse Warehouse

Acceptable Items









METAL AND CANS

PLASTICS #1-5 & #7 CARDBOARD & CARTONS

PAPER & NEWSPAPER

### **METAL and CANS:**

Aluminum and Tin Cans (rinsed drained)

### PLASTICS:

Plastic Containers #1 - 5 and 7 (rinsed drained)

### **CARDBOARD and CARTONS:**

Carton - Cardboard boxes and cartons from items such as milk, juice, soup, crackers, cream, beans, water, broth, wine, etc.

### PAPER:

Paper. Newspaper, Catalogs, Magazines and Phone Books



### GLASS:

Effective immediately, glass is accepted in the green curbside recycling bin.

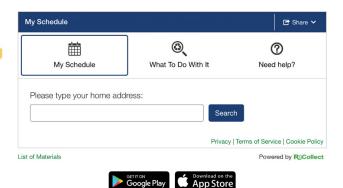
Additional Facilities



### **WEST U HAS AN APP**

### West U Collects - Collection Schedule and Services Guide





### WELCOME TO THE WEST U COLLECTS PAGE!!

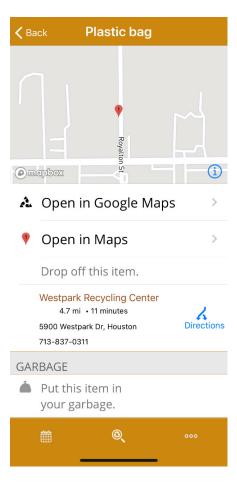
#### **HOW TO GET STARTED**

- 1. Enter your address in the space indicated above.
- 2. Explore and review your schedule.
- 3. You may also download the app for your mobile device by clicking on the links above for Apple or Android devices. You can also search the app store for "West U Collects".

### WHAT TO DO WITH IT FEATURE

Do you have an item you are not sure how to properly dispose of? Feel free to search the "What To Do With It Feature" for more details. This list is updated frequently.







### **DID YOU NOTICE?**

No Number 6 plastics.









Office of Sustainability & the Environment Phone: 310.458.4925 Email: environment@smgov.net Web: sustainablesm.org/container







### **NOT ALWAYS MENTIONED**

No Small plastics
No plastic cutlery
No straws

Darn! I really want to recycle those! I feel your pain!



### **SMALL PLASTICS**

Not usually recyclable, but check with your local department of public works or recycling program. Small plastics, roughly 3 inches or smaller, also can cause problems for recycling equipment. Bread bag clips, pill packaging, single-use condiment pouches — all of these small pieces get caught or fall between the belts and gears of the machinery at the MRF. They end up being treated as trash. Plastic tampon applicators are not recyclable; just throw them away.



### **SPEAKING OF NO STYROFOAM...**

It would *shock* you how many curbside boxes for recycling pickup *still* have the foam in them.









# WE COULD ALWAYS DIVERT FOOD FROM THE LANDFILL.

WE'RE DOING GREAT WITH YARD WASTE.



### **Compost Pick up Services**

Be part of the many individuals, communities and businesses who are changing the world, one bucket at a time!

SIGN UPI

Phone # 346-814-8373

Leo@zerowastethewoodlands.com

Servicing The Woodlands, TX & surrounding areas



### **Single Stream Composting**



**Buckets** 

We provide a clean, recycled bucket, you fill it up with food waste, organic material, biodegradables and/or plant derived waste. Comparable to waste service, we collect the bucket you filled up and we responsibly source it to our local partners.



Composting

The goal is to divert as much solid waste that may be composted, as possible, instead of letting it decompose at the landfill which creates methane (25X more potent than carbon dioxide).



Return to Earth

By separating your food waste and biodegradable items, you are becoming part of the change. Helping communities save on environmentally detrimental waste management solutions, landfill space, in between other socioeconomic benefits.



### HOW ABOUT C&D WASTE?

# OTHER CITIES HAVE DIVERSION ORDINANCES







HOME

ABOU

WASTE COLLECTION

LECTION LANDFILL

TRANSFER STATION

NEWS & ME



### LEED



Lone Star Disposal specializes in hauling and processing waste for LEED certified projects. We offer recycling solutions that virtually no other hauler in the Houston market can – either comingled or source separated at the jobsite. This allows project managers the flexibility to choose how they recycle for maximum efficiency on the job.

### Commingled Recycling

With comingled recycling, the customer places all debris into one container, which we haul to our licensed recycling facility for processing. This method reduces the number of containers required at a customer's location, thus preserving valuable jobsite space. It also

alleviates worker confusion and the need for additional man-hours to constantly monitor what is being thrown into the various recycle containers required for source separated collection. Our highly trained staff sorts the waste, separating the recyclables from the residual and documents the volume/yardage of each commodity on Load Inspection Forms. Specific commodity information from the Load Inspection Forms is then entered into the Lone Star Disposal LEED Project Tracking Tool. This tool automatically tracks the amount of material recycled by commodity from each job and even compares the total amount recycled to a job specific recycling goal. The LEED Project Tracking Tool is kept on file and forwarded to the customer upon request.

Click Here to See an Example of Our LEED Project Tracking Tool

### WHILE OTHER COMPANIES MAY THINK GREEN - WE DO IT!



1



2

### **Nestle**

PIECES OF PLASTIC 4,846 COUNTRIES 31

3



PIECES OF PLASTIC 3,362 COUNTRIES 28

For the second year in a row, brand audit data revealed Coca Cola as #1 Top Global Polluter. A total of 11,732 branded Coca Cola plastics were recorded across 4 continents in 37 countries, more than the next three top global polluters combined.

4



PIECES OF PLASTIC 1,083 COUNTRIES 23

5 Unilever

PIECES OF PLASTIC 3,328 COUNTRIES 21

6 MARS

7 Procter&Gamble
PIECES OF PLASTIC 1,160
COUNTRIES 18

COUNTRIES 20

COLGATE-PALMOLIVE

PIECES OF PLASTIC 642 COUNTRIES 18

9 PHILIP MORRIS INTERNATIONAL
PIECES OF PLASTIC 2,239

10



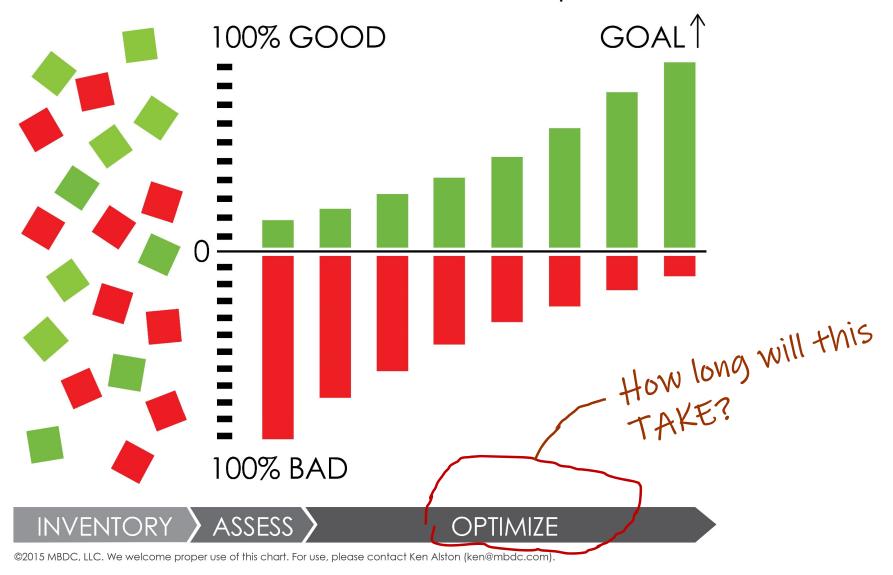
COUNTRIES 17

PIECES OF PLASTIC 1,090 COUNTRIES 17

### **BRAND AUDIT**



### THE UPCYCLE CHART: Continuous Improvement



### **NEXT**

A fabulous example of the power of the consumer to initiate behavioral change from a manufacturer.

It can be done.





### Apple admits mistake, says it's back in EPEAT

Bob Mansfield hints the return to EPEAT was in answer to customer complaints

















By Martyn Williams

Senior Correspondent, IDG News Service | JUL 13, 2012 4:11 PM PT

In a rare admission of error, Apple said Friday that it's back in EPEAT, the environmental standards group for electronics products that it withdrew from earlier this week.

"We've recently heard from many loyal Apple customers who were disappointed to learn that we had removed our products from the EPEAT rating system," read a letter from Bob Mansfield, Apple's senior vice president of hardware engineering, that was posted on the company's website. "I recognize that this was a mistake. Starting today, all eligible Apple products are back on EPEAT."

### MORE LI

Apple kerfuffle prompts laptops

EPEAT green IT registry phones

EPEAT finds thin laptop Air, meet its standard



VIDEO Hoping fo Here's the

### THAT WAS THEN. THIS IS NOW:

On January 2, 2019, Apple CEO Tim Cook addressed a public letter to Apple's investors in which he cut the company's quarterly revenue outlook for the first time in fifteen years. Among the reasons cited was a steep decline in iPhone sales due to eleven million iPhone owners opting for a temporary twenty-nine-dollar sale on battery replacements rather than a far more expensive upgrade. The company has subsequently raised the price of an iPhone battery replacement, presumably to a level that will make an iPhone owner ask: "At that price, doesn't it make more sense just to buy a new phone?"



### AS LONG AS THEY KEEP SELLING

Time for the Apple faithful to pitch another fit?



### FIND YOUR VOICE.

Start with FEEDBACK.

Develop your skills.

### Add a written review

Love this! Works perfectly unlike a competitor! However, packaging is not recyclable! We cannot recycle your Frankenstein paper and plastic pouches! You say you are going green but this is not!

### Add a title

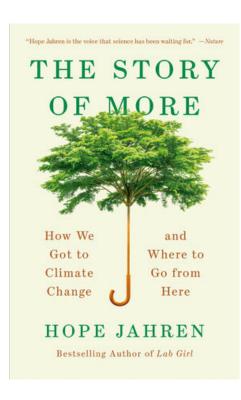
Sum up your review in one line

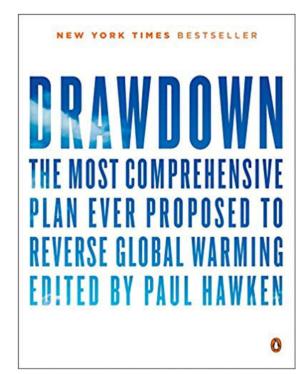
Fabulous product, non-recyclable envelopes!

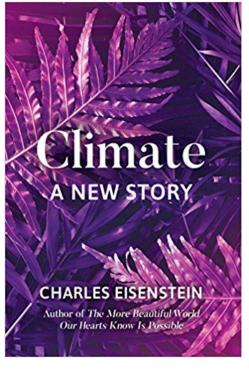
Submit

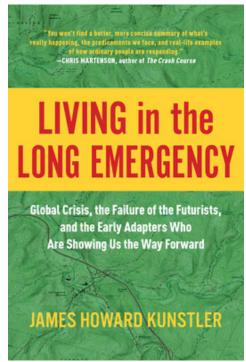


# EARTH DAY: READ THESE 4 CUT TO THE CHASE.





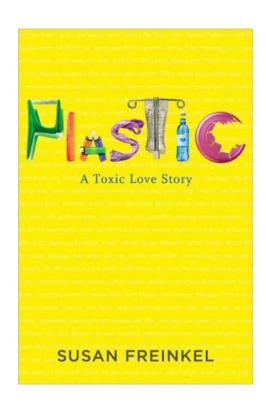


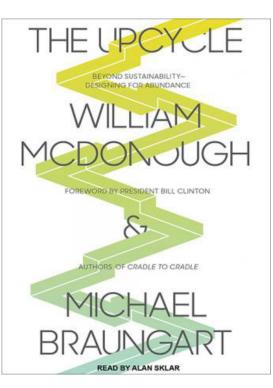


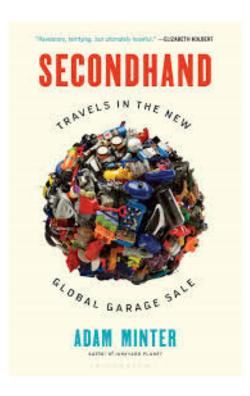
### **EARTH DAY: WATCH**



# WASTE: READ THESE 4 CUT TO THE CHASE.







tatiana
schlossberg
inconspicuous
consumption
the environmental
impact you
don't know
you have

### **WASTE: WATCH**



**Shows** 

Video

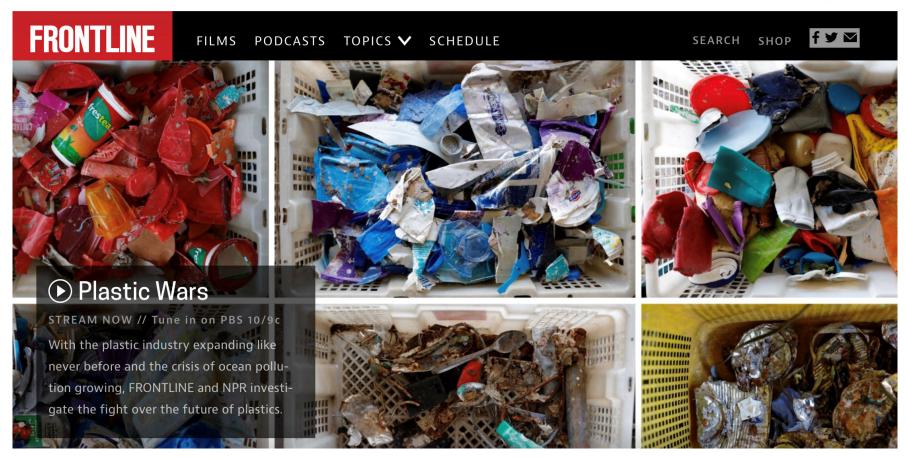
**TV Schedules** 

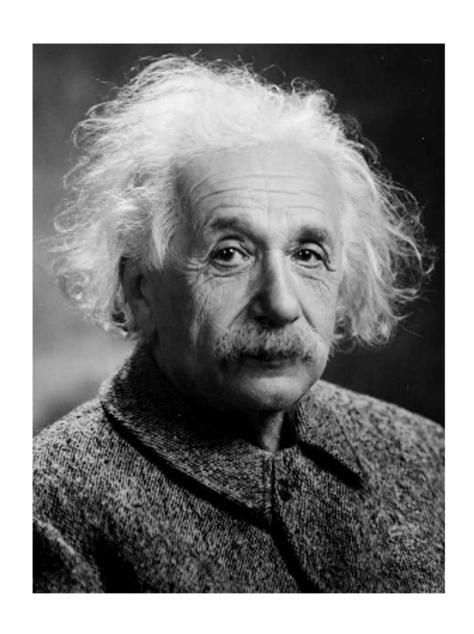
Shop

**Donate** 

Q







"We cannot solve our problems with the same thinking we used when we created them."

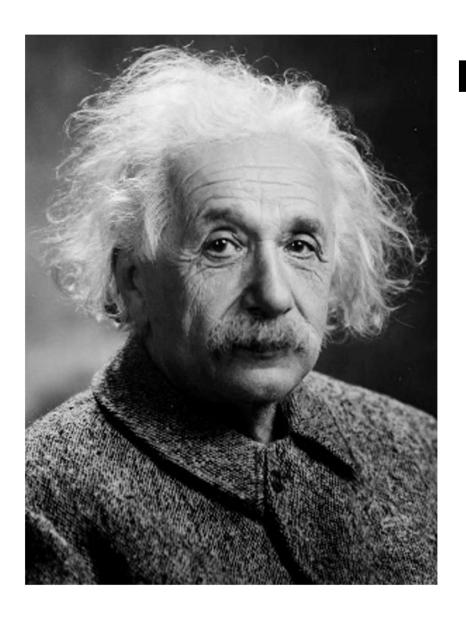
- Albert Einstein

### TAKE YOUR PICK

raise your voice.



# SOMETHING



### NOT MATH PROBLEMS, SOLVE REAL WORLD PROBLEMS. THINKING THEN ACTION.

"We cannot solve our problems with the same thinking we used when we created them."

- Albert Einstein



### thank you!



houstonpublicworks.org



### **WWW.CODEGREENHOUSTON.ORG**



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CITY OF HOUSTON LINKS

+ Public Works Home

+ ReBuild Houston

+ Pay My Waterbill

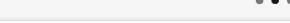
+ City of Houston Home

+ Houston Permitting Center

### Green Building Resource Center 💋







Search





### Environmental Social Governance – Wednesday, March 25, 2020

Changing expectations of business, the new drivers behind the environmental, social, and governance (ESG) revolution, and how companies are responding to demands to increase transparency on their impacts. We decipher the sustainability reporting along the way.

Amanda and David will speak to all current Global, National and Local mandatory regulations, and existing & emerging voluntary standards and certifications; examining Global expectations for International Corporations, like the Sustainable Accounting Board Standard (SASB) and Global Reporting Initiative (GRI), working our way down to requirements to build and operate spaces where occupants can be healthy and productive and everything in between. Sean will speak to all of the above influencers and drivers that led to the decision to build the first LEED v4 Platinum building in Houston. Your chance to understand how each standard, code, initiative and emerging trend ultimately does or does not impact your life (Spoiler: They all do!).

### GBRC Video

#### **Download Related Documents:**

- Environmental Social Governance Flyer
- McMac Cx Presentation
- Global Affairs Presentation
- Bank of America Tower Presentation