



# SRU Beyond Plastic Initiative

## A GUIDE TO MINIMIZING SINGLE-USE PLASTIC PRODUCTS

Updated Nov. 14, 2022

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## EDUCATIONAL FILMS AND VIDEOS

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BALI PLASTICS BAN (11 MINUTES)

[https://www.ted.com/talks/melati and isabel wijzen our campaign to ban plastic bags in bali](https://www.ted.com/talks/melati_and_isabel_wijzen_our_campaign_to_ban_plastic_bags_in_bali)

LIVING PLASTIC FREE (12 MINUTES)

<https://www.youtube.com/watch?v=3JXWRVrFiKs&feature=youtu.be>

PREVIEW ON HOW THE FASHION INDUSTRY IS RESPONSIBLE FOR SO MUCH LAND- FILLED CLOTHING) 2.5 MINUTES

[https://www.youtube.com/watch?](https://www.youtube.com/watch?v=QPMU1VHgmEo&utm_campaign=website&utm_source=realityhub.climaterealityproject.org&utm_medium=email&app=desktop)

[v=QPMU1VHgmEo&utm\\_campaign=website&utm\\_source=realityhub.climaterealityproject.org&utm\\_medium=email&app=desktop](https://www.youtube.com/watch?v=QPMU1VHgmEo&utm_campaign=website&utm_source=realityhub.climaterealityproject.org&utm_medium=email&app=desktop)

TED TALK BY VAN JONES ON TEDXGREATPACIFICGARBAGE "THE ECONOMIC INJUSTICE OF PLASTICS" (12.32 MINS) [https:// www.ted.com/talks/van\\_jones the economic injustice of plastic#t-648511](https://www.ted.com/talks/van_jones_the_economic_injustice_of_plastic#t-648511)

THE STORY OF PLASTIC (GREENPEACE) 4 MINUTES

[videohttps://www.facebook.com/storyofstuff/videos/277990459744577/](https://www.facebook.com/storyofstuff/videos/277990459744577/)

ON E-WASTE (20 MINUTES)

<https://www.fastcompany.com/90313043/how-design-led-to-overconsumption-and-how-it-can-help-stopit?>

WHY I LIVE A ZERO WASTE LIFE (13.5 MINUTES)

<https://www.youtube.com/watch?v=pF72px2R3Hg>

ZERO WASTE IS NOT RECYCLING MORE, BUT LESS VIDEO (12.5 MINUTES)

<https://www.youtube.com/watch?v=kWnsmzSSgdI>

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## WRITTEN ARTICLES

AMERICAN CHEMICAL COUNCIL TERMINOLOGY AND IMAGES (WITH RECYCLING GUIDELINES)

[https://www.recycleandrecoverplastics.org/recycling-professionals/education/terms-tools/#pmtt\\_getTermsToolsPage](https://www.recycleandrecoverplastics.org/recycling-professionals/education/terms-tools/#pmtt_getTermsToolsPage)

ARE YOU READY FOR ROUND 3 OF THE PLASTIC WASTE TRADE WAR?

[https://www.greenbiz.com/article/are-you-ready-round-3-plastic-waste-trade-war?](https://www.greenbiz.com/article/are-you-ready-round-3-plastic-waste-trade-war?utm_source=newsletter&utm_medium=email&utm_content=2019-04-01&utm_campaign=greenbuzz&mkt_tok=eyJpIjoiT0RJMfHTmtZemRsWVdaailsInQiOiJsQUJ3RDEyNIV3Slp)

[utm\\_source=newsletter&utm\\_medium=email&utm\\_content=2019-04-](https://www.greenbiz.com/article/are-you-ready-round-3-plastic-waste-trade-war?utm_source=newsletter&utm_medium=email&utm_content=2019-04-01&utm_campaign=greenbuzz&mkt_tok=eyJpIjoiT0RJMfHTmtZemRsWVdaailsInQiOiJsQUJ3RDEyNIV3Slp)

[01&utm\\_campaign=greenbuzz&mkt\\_tok=eyJpIjoiT0RJMfHTmtZemRsWVdaailsInQiOiJsQUJ3RDEyNIV3Slp](https://www.greenbiz.com/article/are-you-ready-round-3-plastic-waste-trade-war?utm_source=newsletter&utm_medium=email&utm_content=2019-04-01&utm_campaign=greenbuzz&mkt_tok=eyJpIjoiT0RJMfHTmtZemRsWVdaailsInQiOiJsQUJ3RDEyNIV3Slp)  
nRU9h

AVOIDING PLASTICS IN THE BATHROOM

<https://treadingmyownpath.com/2019/06/27/waste-free-bathroom/>

BPA IN CASH REGISTER RECEIPTS

<https://www.consumerreports.org/cro/news/2014/03/the-health-risk-of-bpa-in-receipts/index.htm>

CAN MUSHROOMS SAVE THE WORLD?

<https://www.greenbatch.com/blog/2017/10/10/mushrooms-an-ecological-alternative-to-plastics>

GUIDE TO ELIMINATING PLASTICS FROM THE KITCHEN, BATHROOM, NURSERY AND CLOTHES CLOSETS

<https://www.fastcompany.com/90312169/a-totally-achievable-relatively-painless-guide-to-cutting-plastic-out-of-your-life>

GUIDE TO REUSABLE PRODUCE BAGS

<https://treadingmyownpath.com/2018/07/05/reusable-produce-bag-guide/>

GUIDE TO REUSABLE COFFEE CUPS

<https://treadingmyownpath.com/2017/11/16/reusable-coffee-cups/>

HOW MANY TIMES DO YOU HAVE TO REUSE AN ALTERNATIVE SHOPPING BAG?

[https://www.nytimes.com/2019/03/29/climate/plastic-paper-shopping-bags.html?em\\_pos=small&emc=edit\\_clim\\_20190403&nl=climate-fwd&nl\\_art=3&nlid=77987432c%3Dedit\\_clim\\_20190403&ref=headline&te=1](https://www.nytimes.com/2019/03/29/climate/plastic-paper-shopping-bags.html?em_pos=small&emc=edit_clim_20190403&nl=climate-fwd&nl_art=3&nlid=77987432c%3Dedit_clim_20190403&ref=headline&te=1)

HOW THE U.S. RECYCLING SYSTEM IS BROKEN AND HOW TO FIX IT

<https://www.fastcompany.com/90321566/all-the-ways-recycling-is-broken-and-how-to-fix-them>

IMPACT OF CHINA BAN ON US RECYCLING PROGRAMS

<https://www.vox.com/the-goods/2019/3/18/18271470/us-cities-stop-recycling-china-ban-on-recycles>

LIFE WITHOUT PLASTIC

<https://lifewithoutplastic.com/info/>

NATGEO BLOG RELATED TO RANDY OLSON'S PHOTOS AND THE EFFORT

<https://www.nationalgeographic.com/magazine/2018/06/editor-letter-plastic-planet-waste-pollution-crisis/>

NATGEO PHOTOGRAPHER RANDY OLSON PRESENTATION TITLED "THE PLASTIC APOCALYPSE

<http://www.frackcheckwv.net/2019/02/18/%E2%80%9Cthe-plastic-apocalypse%E2%80%9D-presentation-at-swickeley-pa-22019/>

NATIONAL GEO ON OCEAN PLASTIC <https://oceanconservancy.org/wp-content/uploads/2019/09/Final-2019-ICC-Report.pdf>

NATIONAL GEO ON PLASTIC BOTTLES

<https://www.nationalgeographic.com/environment/2019/08/plastic-bottles/>

NATIONAL GEOGRAPHIC PLASTIC OR PLANET" MULTI-YEAR EFFORT  
<https://www.nationalgeographic.com/environment/planetforplastic/>

PLASTIC FREE ECO CHALLENGE  
<https://plasticfree.ecochallenge.org/about/resources>

PSU E-COIN FOR REFUSING PLASTIC BAGS  
<https://news.psu.edu/story/564311/2019/03/19/impact/ecocoin-program-expanding-commonwealth-campuses>

USING LESS PLASTIC  
[https://www.facebook.com/UsingLessPlastic/?\\_tn\\_=KH-R&eid=ARCGd3YuX-aetHgmz3lphfxliLx2QNmCHFAQZUwrrFWjj2K0JIOFRQkqNX6-PiUAA-H0NfmfpcRMs3Tc&fref=mentions&\\_xts\\_\\_\[0\]=68.ARBqJUmv2pNL2wdZPji6LMkO4SgLYIX7NHCI6dZaB1gA-tlO4ODtmDzEo9Cr5SzEl1dk-gD5rBYdNr3Au5sowtVlw9kXed92beZ2zRcxSDaRVm5DDfzGZKNob-VqRfHk92ZpfwyYwPQkfdizvZKR3mqqlfAGvkmI8bApq\\_AG2O2EtLeeYEPZcQosYae\\_RjnyUrXzRZEomZN4jJ2RRGJ4I](https://www.facebook.com/UsingLessPlastic/?_tn_=KH-R&eid=ARCGd3YuX-aetHgmz3lphfxliLx2QNmCHFAQZUwrrFWjj2K0JIOFRQkqNX6-PiUAA-H0NfmfpcRMs3Tc&fref=mentions&_xts__[0]=68.ARBqJUmv2pNL2wdZPji6LMkO4SgLYIX7NHCI6dZaB1gA-tlO4ODtmDzEo9Cr5SzEl1dk-gD5rBYdNr3Au5sowtVlw9kXed92beZ2zRcxSDaRVm5DDfzGZKNob-VqRfHk92ZpfwyYwPQkfdizvZKR3mqqlfAGvkmI8bApq_AG2O2EtLeeYEPZcQosYae_RjnyUrXzRZEomZN4jJ2RRGJ4I)  
[H6hoZeb7nsKqp1IH4jQxrJC1mARnwPCj5m0hi08l0T45tKEoBF3ge6njigyyMLOU8K6tNiVbF9iObGDZt7U5aOQbOjkX nrlQntCQywhVnflAdfETLMjaOyMrSzGog](https://www.facebook.com/UsingLessPlastic/?_tn_=KH-R&eid=ARCGd3YuX-aetHgmz3lphfxliLx2QNmCHFAQZUwrrFWjj2K0JIOFRQkqNX6-PiUAA-H0NfmfpcRMs3Tc&fref=mentions&_xts__[0]=68.ARBqJUmv2pNL2wdZPji6LMkO4SgLYIX7NHCI6dZaB1gA-tlO4ODtmDzEo9Cr5SzEl1dk-gD5rBYdNr3Au5sowtVlw9kXed92beZ2zRcxSDaRVm5DDfzGZKNob-VqRfHk92ZpfwyYwPQkfdizvZKR3mqqlfAGvkmI8bApq_AG2O2EtLeeYEPZcQosYae_RjnyUrXzRZEomZN4jJ2RRGJ4I)

WHAT CAN UNIVERSITIES DO?  
<https://universitybusiness.com/recycling-on-campus-affected-by-chinas-plastics-ban>

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## FACTS ABOUT PLASTIC

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### GLOBAL FACTS

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- Humans buy a million plastic bottles per minute.
- 91% of all plastic is not recycled.
- Over half a trillion plastic bottles will be sold in 2020.
- An estimated 50 percent of plastic consumed globally is single-use.
- Most plastic water bottles are made of PET plastic, or polyethylene terephthalate, which is made from crude oil and can take over 400 years to degrade.
- Approximately 8 million tons of plastic end up in the ocean each year.
- The Great Pacific Garbage Patch is an island of floating trash, more than twice the size of Texas, which lies between Hawaii and California. It contains more than 1.8 trillion pieces of plastic and weighs over 88,000 tons.
- By 2050, there will be more pounds of plastic in the ocean than pounds of fish.
- A recent study by Ghent University in Belgium found that people who regularly eat seafood ingest up to 11,000 tiny pieces of plastic each year.
- A study by Plymouth University found that one-third of all fish caught in the UK contained tiny pieces of plastic.
- A single plastic bag can take up to 1,000 years to degrade.
- Roughly 95% of the value of plastic packaging is lost after its first use, or \$120 billion globally.
- "Bioplastic" products are often made of PLA (polylactic acid), which comes from agricultural waste (sugar cane bagasse, corn starch, etc.) – better than plastic because it's not derived from petroleum, but is not really biodegradable unless placed in an industrial composting system. "INGEO" and "Plantware" are two common brands.

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### USA FACTS

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- 380 BILLION plastic bags and wraps are used by Americans use each year (EPA estimate).
- 7.6 BILLION pounds of disposable diapers are discarded each year in the U.S., according to the EPA.
- 2.8 BILLION pounds of plastic bottles were created in the U.S. in 2017; only 29.3% were recycled.
- Americans buy more than half a billion bottles of water every week. That's enough to circle the globe more than 5 times.
- Bottled water costs consumers 240 to 10,000 times more per gallon than tap water that is as good, or better.
- Each year, making the plastic water bottles used in the U.S. takes enough oil and energy to fuel a million cars.
- Plastic scrap exports to China plummeted from around 250,000 tons in the spring of 2017 to near zero in the spring of 2019.
  
- Overall, U.S. exports of plastic waste to all countries fell from 750,000 tons to 375,000 tons over the same period. Many plastic products in groups 3-7, the least recyclable types, are being sent to landfills.
- New York City residents use more than 10 billion single-use carryout bags every year and it costs

the City more than \$12 million annually to dispose of these bags. Consumers forget to bring their reusable bags to the store 40% of the time and opt for a single-use plastic or Paper bag instead.

## PETRO-CHEMICAL INDUSTRY FACTS

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- The petrochemical/plastics industry already accounts for nearly 7 percent of global greenhouse gas emissions; carbon emissions from the petrochemicals and plastics industry are expected to grow 20 percent by 2030. [IEA]
- Out of all of the plastic waste disposed up to 2015, only 9 percent of plastics were actually recycled. Seventy-nine percent is sent to landfills – where it can be carried by wind and rain to pollute our broader environment, and the remaining 12 percent is incinerated. Burning plastic releases highly toxic dioxins into the air we breathe.
- Petrochemical sales are estimated to account for more than a third of all oil industry growth by 2030, and over half by 2050, with projections of sales for this purpose adding up to 7 million barrels of oil per day. Approximately 50% of all plastic is single-use, leading cities and countries to ban single use plastics entirely. These bans are estimated to reduce that demand for oil by 3 million barrels/day, making ethane cracker plants a much more questionable investment.
- Seven ethane cracker facilities located in close proximity to existing natural gas wells in the Ohio River Valley have been proposed since 2014. Construction has already begun on the Shell plant in Beaver County, Pennsylvania, with other potential facilities slated to be built in Parkersburg and Charleston, West Virginia; Calvert City, Kentucky; and Salem, Monroe County, and Belmont County, Ohio.
- In its full life-cycle, ethane cracking emits 840 kg of CO<sub>2</sub> per ton of ethylene. The Shell plant in Beaver County is expected to produce 1.6 million tons of ethylene, resulting in 1.34 MMTCO<sub>2</sub> emissions. This is equivalent to introducing over 290,000 cars on the road.

## HOW SUSTAINABLE IS YOUR BAG?

Bag Type	Typ. Material Used	# times re-used to equal env. footprint of PRB (APPROXIMATE)
"PRB" Single Use "Plastic Retail Bag"	#2 HDPE, 30% Recycled material	1
Paper	100% recycled paper	3
	40% recycled paper	6
#4 LDPE Heavy duty bags)	Low Density Polyethylene	6
Non-woven PP	#5 polypropylene	11
Non-woven PP/LDPE	#5 polypropylene with #4 LDPE insert	21
Cotton	cotton	131
Hemp		?
Upcycled T-Shirt	cotton	?

Source: 2014 Clemson U. Life Cycle Assessment of Grocery Bags in Common Use in the United States

## ALL ABOUT BIOPLASTICS

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### All About Bioplastics

<u>TYPE of BIOPLASTIC</u>	<u>MADE FROM</u>	<u>MADE INTO</u>	<u>COMPOSTABLE?</u>	<u>BIODEGRADABLE?</u>	<u>RECYCLABLE?</u>	<u>IMPACT ON CARBON EMISSIONS*</u>
<b>BIOPLASTICS &amp; BIO-BASED PLASTICS</b>	BIOMASS - Renewable feedstock like waste sugar cane pulp, starch, fiber	PE (polyethylene) or PET (polyethylene terephthalate) -plastic bottles	NO	NO	YES	Carbon Neutral or carbon negative*
<b>BIO-DERIVED POLYMERS</b>	Mix of plant and FOSSIL FUEL feed-stock	PE (polyethylene) - Coca Cola's "Plant Bottle" is 30% plant, 70% fossil fuel, 100%	NO	NO	YES	INCREASES GHG's due to fossil fuel use
<b>BIOPOLYMERS<sup>1</sup></b>	Made from plants (chitin, cellulose) or produced by bacteria	PLA (from plants), PHA (from bacteria)	ONLY in INDUSTRIAL COMPOSTER	NOT IN SOIL or OCEAN; only in INDUSTRIAL SYSTEM	YES	Carbon Neutral or carbon negative*

\* Even though bioplastics and biopolymers may not biodegrade or be composted, being placed in a landfill would sequester the carbon contained in the material and therefore considered "carbon-negative". In all cases, however, the extent of fossil fuel use in manufacturing and transporting all plastic materials should be considered in estimating its impact on greenhouse gas emissions - making reusable products always preferable to single-use disposable products!

<sup>1</sup> Biopolymers made into PHA are often used to make utensils and plates that are much healthier to use than products made from PS (polystyrene) that can leach styrene and contain hormone disrupters. Biopolymers made into PLA are often used to make drinking straws, transparent cups and lids (brand names "INGEO" and "PLANTWARE" use PLA) and are also safer than items made from PS.



## LIST OF ALTERNATIVES TO SINGLE-USE, DISPOSABLE PLASTIC PRODUCTS

Plastics Category	Alternatives to Disposable Products	Materials Used	Website Links
General	Pgh. Store w/ variety of products		<a href="https://www.facebook.com/OurChildrenOurEarth/">https://www.facebook.com/OurChildrenOurEarth/</a>
	East End Co-op (Grocery Store)		<a href="https://www.eastendfood.coop/">https://www.eastendfood.coop/</a>
SINGLE-USE DISPOSABLE BAGS			
	Baggu reusable bag	40% recycled nylon sourced from pre-consumer waste.	<a href="https://baggu.com/collections/reusable-bags?source=pepperjam&amp;publisherId=21181&amp;clickId=2672023727">https://baggu.com/collections/reusable-bags?source=pepperjam&amp;publisherId=21181&amp;clickId=2672023727</a>
	ChicoBag PET VITA, Sling shopping bags	Recycled disposable plastic bottles (PET)	<a href="https://www.chicobag.com/">https://www.chicobag.com/</a>
	Giant Eagle reusable bags (5 types)	Various plastics	
	Handy grocery shopping bag that fits in shopping cart (Set of 2)	High-grade PP and non-woven cloth with handles	<a href="https://tinyurl.com/42547smr">https://tinyurl.com/42547smr</a>
	Plant-based fabric bag	Cellulose sustainable wood fiber, corn-based PLA	<a href="https://ragbags.com/">https://ragbags.com/</a>
	Stasher bag	100% recyclable Silicone	<a href="https://www.stasherbag.com/">https://www.stasherbag.com/</a>
	TerraCycle bags	recycled drink pouches	<a href="https://www.dwellsmart.com/collections/reusable-bags">https://www.dwellsmart.com/collections/reusable-bags</a>
	Mesh produce bags	Organic cotton	<a href="http://www.purifyyou.com">www.purifyyou.com</a>
	Mesh produce bags	Food grade, BPA-free mesh	<a href="https://earthsider.com/products/zero-waste-reusable-produce-bags-12pcs-test?fbaid=23843445164360409">https://earthsider.com/products/zero-waste-reusable-produce-bags-12pcs-test?fbaid=23843445164360409</a>
	Mesh produce bags	Food grade, BPA-free mesh	<a href="http://www.purifyyou.com">www.purifyyou.com</a>
	Mesh produce bags	Food grade, BPA-free mesh	<a href="https://www.amazon.com/Vandoona-Food-safe-Reusable-Mesh-Produce/dp/B07FT4ZCKZ">https://www.amazon.com/Vandoona-Food-safe-Reusable-Mesh-Produce/dp/B07FT4ZCKZ</a>

	Mesh produce bags	Food grade, BPA-free mesh	<a href="https://www.amazon.com/Vandoona-Food-safe-Reusable-Mesh-Produce/dp/B07FT4ZCKZ">https://www.amazon.com/Vandoona-Food-safe-Reusable-Mesh-Produce/dp/B07FT4ZCKZ</a>
	Mesh produce bags	Food grade, BPA-free mesh	<a href="https://www.amazon.com/Vandoona-Food-safe-Reusable-Mesh-Produce/dp/B07FT4ZCKZ">https://www.amazon.com/Vandoona-Food-safe-Reusable-Mesh-Produce/dp/B07FT4ZCKZ</a>
PAPER, FIBER, S.S., GLASS LUNCH BOXES, SNACK BAGS			
	Reusable Lunch Bags	Various materials (paper, fiber-based, etc.)	<a href="https://www.amazon.com/stores/node/3034239011?encoding=UTF8&amp;field-lbr_brands_browse-bin=LunchSkins&amp;ref=bl_dp_s_web_3034239011">https://www.amazon.com/stores/node/3034239011?encoding=UTF8&amp;field-lbr_brands_browse-bin=LunchSkins&amp;ref=bl_dp_s_web_3034239011</a>
	Lunch containers & water bottles	Various materials	<a href="https://www.swellbottle.com">https://www.swellbottle.com</a>
	Food Canister	Stainless steel	<a href="http://www.kleankanteen.com">www.kleankanteen.com</a>
	ECO lunch box	Stainless Steel Lunch Boxes w/ silicone lid	<a href="https://ecolunchboxes.com/collections/lunch-boxes">https://ecolunchboxes.com/collections/lunch-boxes</a>
	Glass Salad Jars	Use widemouth glass canning jar	
	ChicoBag Snack Bags (Set of 3)	Recycled disposable plastic bottles (PET)	<a href="https://www.chicobag.com/product-snack-time-repete-17">https://www.chicobag.com/product-snack-time-repete-17</a>
	ChicoBag reusable water bottle sling	Recycled disposable plastic bottles (PET)	<a href="http://www.chicobag.com">www.chicobag.com</a>
Plastic Straws			
	Metal Straw	Stainless Steel	<a href="https://brandless.com/products/metal-straws?utm_source=impact&amp;utm_campaign=8771&amp;utm_medium=10078&amp;utm_content=513280&amp;clickid=2J8Xez3H1xyJTNh0MvSyQWIBUklws126VRlyRs0&amp;irgwc=1">https://brandless.com/products/metal-straws?utm_source=impact&amp;utm_campaign=8771&amp;utm_medium=10078&amp;utm_content=513280&amp;clickid=2J8Xez3H1xyJTNh0MvSyQWIBUklws126VRlyRs0&amp;irgwc=1</a>
	Metal Straw	Stainless Steel	<a href="https://www.swellbottle.com/products/swell/accessories/stainless-steel-straw-set/">https://www.swellbottle.com/products/swell/accessories/stainless-steel-straw-set/</a>
	SS telescoping straw	Stainless Steel	<a href="https://leafico.com/">https://leafico.com/</a>
	Compostable Straw	"Hyper Compostable" Seaweed	<a href="https://www.loliware.com/">https://www.loliware.com/</a>
	Metal Straw	S.S. straws with silicone tips & cleaning brush	<a href="http://www.kleankanteen.com">www.kleankanteen.com</a>
	S.S. straw with silicone tip	Stainless steel w/silicone tips	<a href="http://www.finalstraw.com">www.finalstraw.com</a>

	Strawbit Bracelet Straw	Silicone	<a href="https://strawbit.com/">https://strawbit.com/</a>
SINGLE-USE DISPOSABLE PLASTIC WATER BOTTLES & COFFEE CUPS			
	Aluminum water bottles by the case	Aluminum	
	Reusable water bottles	Various materials	<a href="https://www.swellbottle.com/shop/swell/travelers/">https://www.swellbottle.com/shop/swell/travelers/</a>
	Paper bottles	Paper	<a href="https://ecologicbrands.com/about/">https://ecologicbrands.com/about/</a>
	Recyclable, reusable "Bottles" made of 54% paper and 28% plant-based plastic		<a href="https://www.shopjustwater.com/collections/demo-infused/products/just-water-24-pack?gclid=CjwKCAjw5fzrBRASEiwAD2OSV-f0A67bd7eP-WGoOvM8BhKbKJ44j1tHuPu_Yj4jsl9PQF-XPtnqZ3xoCXFcQAvD_BwE">https://www.shopjustwater.com/collections/demo-infused/products/just-water-24-pack?gclid=CjwKCAjw5fzrBRASEiwAD2OSV-f0A67bd7eP-WGoOvM8BhKbKJ44j1tHuPu_Yj4jsl9PQF-XPtnqZ3xoCXFcQAvD_BwE</a>
	Insulated coffee cup mug tumblers	Stainless steel	<a href="http://www.kleankanteen.com">www.kleankanteen.com</a>
	Insulated bottles	Stainless steel	<a href="https://www.miid.com">https://www.miid.com</a>
	"StoJo" silicone collapsible travel cup	Silicone	<a href="https://stojo.co/">https://stojo.co/</a>
	"Hydaway" collapsible travel cup	Silicone	<a href="https://hydawaybottle.com/">https://hydawaybottle.com/</a>
	Wide mouth, fitness styles	BPA-free plastic	<a href="https://www.nalgene.com/">https://www.nalgene.com/</a>
	Glass bottles	Glass with silicone carrier	<a href="http://www.purifyyou.com">www.purifyyou.com</a>
	YETI insulated bottles w/ hotshot lid	Stainless steel	<a href="https://www.yeti.com/en_US/insulated-water-bottles">https://www.yeti.com/en_US/insulated-water-bottles</a>
	Insulated bottles	Stainless steel	<a href="http://www.kleankanteen.com">www.kleankanteen.com</a>
	Insulated bottles	Stainless steel	<a href="https://www.hydroflask.com/">https://www.hydroflask.com/</a>
	Pocket-size expandable plastic coffee cup	BPA-free recycled plastic	<a href="https://pokito.net/">https://pokito.net/</a>
PLASTIC TO-GO FOOD CONTAINERS, WRAPS, CELLOPHANE			
	Food storage containers	Stainless steel	<a href="http://www.kleankanteen.com">www.kleankanteen.com</a>
	Food storage containers	Pyrex	<a href="https://www.pyrexhome.com/contact-us">https://www.pyrexhome.com/contact-us</a>
	Food Wraps (cellophane replacement)	Bees wax	<a href="https://abeego.com/">https://abeego.com/</a>
	Food bags and wraps	Bees wax and organic cotton	<a href="http://www.shopetee.com">www.shopetee.com</a>

	Reusable lids	BPA-free food grade silicone	<a href="http://www.earthsider.com">www.earthsider.com</a>
	Stretch lids	Silicone	<a href="https://www.facebook.com/A-sustainable-You-1063659643832412/">https://www.facebook.com/A-sustainable-You-1063659643832412/</a>
	Stretch lids	Silicone	<a href="https://foodhuggers.com">https://foodhuggers.com</a>
	Food wraps	plant-based waxes & cotton- hemp	<a href="https://earthhero.com/products/travel/khala-cloths-khala-vegan-reusable-food-wraps-variety-pack/">https://earthhero.com/products/travel/khala-cloths-khala-vegan-reusable-food-wraps-variety-pack/</a>
	Eco-lids	food-grade silicon	<a href="https://earthandfriends.store/collections/home-kitchen/products/siliconelids">https://earthandfriends.store/collections/home-kitchen/products/siliconelids</a>
	Cellophane alternative	Wood pulp cellophane	<a href="https://www.google.com/search?client=firefox-b-1-d&amp;q=wood+pulp+cellophane+packaging">https://www.google.com/search?client=firefox-b-1-d&amp;q=wood+pulp+cellophane+packaging</a>
	FreshServe deli containers	bioplastics	<a href="http://www.biomasspackaging.com/brands/freshserve/">http://www.biomasspackaging.com/brands/freshserve/</a>
	Fresh fruit & vegetable wrapping	palm leaf	<a href="https://arekapak.de/">https://arekapak.de/</a>
	Collapsible food containers	silicone	<a href="https://www.google.com/search?client=firefox-b-1-&amp;q=collapsible+silicone+food+storage+containers">https://www.google.com/search?client=firefox-b-1-&amp;q=collapsible+silicone+food+storage+containers</a>
PLASTIC DIXIE CUPS			
	Kraft Paper Cups	Paper	<a href="https://www.restaurantware.com/disposables/coffee-cups-accessories/coffee-cups/8-oz-kraft-paper-coffee-cup-double-wall-3-1-2-x-3-1-2-x-3-1-4-25-count-box/?gclid=EAlaIqobChMIha7nmvCz-wIVscmUCR2J1AUOEAOYASABEgJL9fD_BwE">https://www.restaurantware.com/disposables/coffee-cups-accessories/coffee-cups/8-oz-kraft-paper-coffee-cup-double-wall-3-1-2-x-3-1-2-x-3-1-4-25-count-box/?gclid=EAlaIqobChMIha7nmvCz-wIVscmUCR2J1AUOEAOYASABEgJL9fD_BwE</a>
	Ecotainer cups	Cellulose sustainable wood fiber	<a href="http://www.biomasspackaging.com/brands/ecotainer/">http://www.biomasspackaging.com/brands/ecotainer/</a>

PLASTIC BOWLS, PLATES, DINNERWARE, UTENSILS

	Bamboo Dinnerware	bamboo bowls and utensil sets	<a href="https://www.by-ekobo.us/our-brands/biobu-by-ekobo/gusto/gusto-190-oz-large-salad-bowl">https://www.by-ekobo.us/our-brands/biobu-by-ekobo/gusto/gusto-190-oz-large-salad-bowl</a>
	Bamboo utensils, "full size" set	Bamboo utensil sets in RePETe utensil holders	<a href="https://www.facebook.com/OurChildrenOurEarth/">https://www.facebook.com/OurChildrenOurEarth/</a>
	Bamboo utensils in canvas holder	Bamboo	<a href="https://thesustainabletomorrow.com/collections">https://thesustainabletomorrow.com/collections</a>
	Leafware	Fallen leaves	<a href="http://www.biomasspackaging.com/brands/leafware/">http://www.biomasspackaging.com/brands/leafware/</a>
	Be Green containers	Renewable fiber	<a href="http://www.biomasspackaging.com/brands/be-green-packaging/">http://www.biomasspackaging.com/brands/be-green-packaging/</a>
	Cutlery	Bioplastics	<a href="https://www.ecoproductsstore.com">https://www.ecoproductsstore.com</a>
	To-go containers and cutlery	Bioplastics	<a href="http://www.ecoproducts.com">www.ecoproducts.com</a>
	Food storage containers	Recycled #5 plastic	<a href="https://www.preserve.eco/products/food-storage-set-6-containers">https://www.preserve.eco/products/food-storage-set-6-containers</a>

SYNTHETIC CLOTHING, ACTIVE WEAR, BACKPACKS, ETC.

	Sustainable clothing	Recycled disposable plastic bottles (PET)	<a href="https://repreve.com/brands">https://repreve.com/brands</a>
	Backpacks and activewear clothes	Recycled plastic bottles	<a href="https://threadinternational.com/">https://threadinternational.com/</a>

PLASTIC PACKAGING MATERIALS

		Palm leaf	<a href="https://holylama.co.uk/plastic-free-ayurvedic-soaps/">https://holylama.co.uk/plastic-free-ayurvedic-soaps/</a>
		Paper	<a href="https://ecologicbrands.com/">https://ecologicbrands.com/</a>
		Plant starch	<a href="http://www.greenlightpackaging.com/our-products/biodegradable-loose-fill/">http://www.greenlightpackaging.com/our-products/biodegradable-loose-fill/</a>
		Mushroom	<a href="https://ecovatedesign.com/packaging">https://ecovatedesign.com/packaging</a>

		Seed Phytonutrients	<a href="https://blog.seedphytonutrients.com/blog/the-story-behind-the-beauty-industrys-most-eco-friendly-packaging">https://blog.seedphytonutrients.com/blog/the-story-behind-the-beauty-industrys-most-eco-friendly-packaging</a>
		Wheatgrass-bagasse clamshells	<a href="https://greenpaperproducts.com">https://greenpaperproducts.com</a>
		Loop/Terracycle reusable shipping containers	<a href="https://loopstore.com/">https://loopstore.com/</a>
MAKE-UP			
	<a href="https://elatebeauty.com/">Elate Cosmetics</a>	Sustainable, plastic-free make-up	<a href="https://elatebeauty.com/">https://elatebeauty.com/</a>
	<a href="https://kjaerweis.com/">Kjaer Weis</a>	sustainably packaged make-up	<a href="https://kjaerweis.com/">https://kjaerweis.com/</a>
	<a href="https://www.antonymcosmetics.com/">Antonym</a>	Sustainable, plastic-free make-up	<a href="https://www.antonymcosmetics.com/">https://www.antonymcosmetics.com/</a>
	<a href="https://nudigoods.com/">Nudi Goods</a>	Plastic free packaging for make-up and skincare	<a href="https://nudigoods.com/">https://nudigoods.com/</a>
MISCELLANEOUS AND PERSONAL CARE PRODUCTS			
	<a href="https://www.grove.co/catalog/product/glass-dish-soap-dispenser/?v=3125&amp;attrsrc=22&amp;attrpg=catalog&amp;attrpos=20">Reusable jars, dispensers</a>	Glass	<a href="https://www.grove.co/catalog/product/glass-dish-soap-dispenser/?v=3125&amp;attrsrc=22&amp;attrpg=catalog&amp;attrpos=20">https://www.grove.co/catalog/product/glass-dish-soap-dispenser/?v=3125&amp;attrsrc=22&amp;attrpg=catalog&amp;attrpos=20</a>
	<a href="https://www.cleancult.com/#">Household cleaners</a>	Natural materials	<a href="https://www.cleancult.com/#">https://www.cleancult.com/#</a>
	<a href="https://www.blueland.com/">Household cleaners</a>	Paper packaging, natural materials	<a href="https://www.blueland.com/">https://www.blueland.com/</a>
	<a href="#">Name tags</a>	Compostable name tags	
	<a href="http://www.leafico.com">Toothbrush</a>	Bamboo	<a href="http://www.leafico.com">www.leafico.com</a>

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