



The Young  
Leaders Plastic  
Challenge



clean  
seas  
turn the tide  
on plastic

# Plastic Tide Turners

Young Leaders Challenge

India

TOOLKIT



## Foreword

Anything that sounds too good to be true probably is. Plastic is no exception. Cheap, durable, and light, plastic has made its way into every country, every society, every lifestyle. Yes, it makes life easier in lots of ways. Who amongst us can say they've never used a plastic straw, plastic shopping bag, or plastic spoon? But here's the downside: Our production and consumption of single use and disposable (use and throw) plastics and our inability to manage plastic waste sustainably have led to a massive pollution problem. Marine litter and microplastics are flooding our oceans and is hurting marine ecosystems and human health on an unprecedented scale.

The solution does not lie at sea, though. It lies on land with us, the ones who started the problem.

From cutting back on our use of single-use disposable plastic to recycling more effectively to finding sustainable alternatives to plastic, solutions to plastic pollution are within our grasp.

In this leadership challenge, we're going to learn what those solutions are and how we can be a part of them. That's just the beginning. Then we will lay out a plan for how we can inspire others to join in the fight against plastic pollution. The final frontier will be a set of challenges that we hope could unleash a new movement for action that will seek to reduce plastic waste where it matters most: upstream.

We're fortunate to have as beautiful a place as planet earth to call home. And let's not forget, we share this home with wondrous plants and animals, all of whom are doing their part to keep the planet healthy and beautiful. Let's do our part, too. Let's keep our oceans, forests, rivers, and roads picture perfect and free of plastic pollution.

## Learning outcomes

So, you want to do something about plastic pollution? Or you've been hearing a lot about it and you're curious? Completing this challenge is a great place to start! You might be wondering: what's the point of the challenge, why can't I just jump in right away and do something about plastic? Great enthusiasm, love it! But go ahead and use the toolkit, because it will help you have a bigger impact in your work.

In fact, by the time you complete this challenge, you will be able to:

Understand how plastic pollution is threatening life in oceans, other water bodies and on land;

Understand how the global community is tackling the issue;

Understand and act to reduce your personal use of single-use or disposable plastics;

Inspire your friends, family, school/college, and community to refuse, reduce, reuse and recycle single-use or disposable plastics;

Take the lead on a wider scale to create lasting change in your region or community related to the use of single-use plastics and marine litter and microplastics.

## About the challenge

The challenges are grouped into three levels—entry level (1), leader level (2), and champion level (3)—with background information in between that will help you learn more about specific issues related to single-use disposable plastics, plastic waste, and plastic pollution.

Each level of challenges comes with a scoring system. Scoring enough points at each stage entitles you to move on to the next level of challenges. Why wait around? **Let's get underway!**

## Before badge quiz: 11 compulsory questions before you start

You're joining in the Plastic Tide Turner Challenge—yay! Before forging ahead, please take the following 11 quick questions. Doing so will give us an idea of common practices, opinions, and trends around the use of plastic.

**Leader Code:** .....

**Name:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Age Group:**

**Gender: Male / Female**

11-16       16-25       26 and above

**Circle the most appropriate option in the table below.**

1.	In the past month, have you avoided eating at places that serve food with single-use plastic spoons & forks ?	Yes	No	Not Sure
2.	In the past month, have you avoided using single use plastic bag?	Yes	No	Not Sure
3.	Sheila drinks water from a disposable plastic cup. Is this a good idea?	No	Yes	I don't know
4.	Do you like to drink juice and soft drinks with a plastic straw?	No	Yes	No preference
5.	The take away food that Anubhav orders comes in a disposable plastic container. Do you think he should continue ordering from that restaurant?	Yes	No	Not sure
6.	Do you believe you can change the way your friends and family use single use plastics in their everyday lives by talking to them about the issues around plastic?	Disagree	Agree	Not Sure
7.	Have you ever spoken to your scrap dealer or raddiwala or kabadi about how and where they dispose the scrap they collect?	Yes	No	Don't Remember
8.	If you have to use single-use plastics, are you aware of the correct ways of disposing them?	Yes	No	Not Sure
9.	Vidur organized a community clean up with a small group of people. Have you ever organized a clean-up drive or participated in one?	Yes	No	Not successfully
10.	Mita convinced her local grocery store to give up polybags. Have you ever discouraged a vendor in the local market to do so?	Yes	No	Not successfully
11.	Does your family practice segregation of wet and dry waste at home?	Yes	No	Not sure

## Background Information

### The problem with plastic pollution

Imagine if you could do something about ocean pollution, climate change, human health and floods all at once! Sounds like a job for a superhero? Actually, it could be *you!* And all you'd have to do is refuse, reduce, reuse and recycle plastic in your daily life and get others to do the same. Hello, Captain No-Plastic! If that sounds weird, guess what? It gets weirder. Plastic is not only connected to ocean pollution, climate change, human health and flooding, but much, much more. Try tourism, toxic waste and turtle safety. But let's not get ahead of ourselves.

#### Learning Outcome 1

### 1. What's the scoop on plastic?

Have you ever stopped to think about how much plastic you use? For most of us, the answer is a *lot*. From shampoo bottles to food packaging to toys and even clothing—a surprising amount of the stuff we encounter on a daily basis is either made of plastic or has some plastic component to it. So why did we end up using so much plastic and is it all bad?

The main problem lies with single-use plastics, or things we use just one time and then throw away. These include plastic straws, takeout containers, food wrappers, water bottles, and shopping bags. We use and toss way more single-use plastics than we need.

#### Don't mean to keep you up at night, but...

Around the world,  
**1 million**

packaged drinking bottles are purchased every minute.



Every year we use up to  
**5 trillion**

single-use plastic bags. What does that look like? Well, if tied together, plastic bags could be wrapped around the world seven times every hour.

50 percent of all the plastic we use is single-use.

Sources : [worldenvironmentday.global/en/about/beat-plastic-pollution](http://worldenvironmentday.global/en/about/beat-plastic-pollution) and [The State of Plastics](#)

#### What are plastics?

Invented in 1907, a plastic is a type of human-made material that can be formed into almost any shape. Plastic is really useful and when we first created it, we knew we were onto something big. It is cheap, flexible, and hard to break. It lends itself easily to the manufacture of zillions of products.



#### Two not-nice nines

Throughout history, humans have produced 9 billion tonnes of plastic. What does that look like? According to one scientist, if you spread out **9 billion tonnes of plastic** at an ankle-deep level, it would take up an area the size of Argentina—or nearly four times the size of Texas.

The other nasty nine? Just **9 percent of the nine billion tonnes** of plastic we've created has been recycled (turned into something reusable).

### 2. How's plastic hurting?

If you're scared to ask, we'll do it: **If only 9 percent of plastic has been recycled, what happens to the rest of it?**

This is where things get problematic. Our waste management systems don't have what it takes to contain the plastic onslaught. The plastic we throw away goes to fill into drains, piles up on roads or open lands and gets buried under soil. It may even reach water bodies including rivers and seas or end up in landfills, which (in theory, at least) are special sites dedicated to safely containing garbage. A huge quantity of plastic also goes to trash dumps. Many of these are right by the sea, which means trash overflows from them directly into the ocean (Source: [www.earthday.org/2018/04/06/where-does-your-waste-go](http://www.earthday.org/2018/04/06/where-does-your-waste-go)).



Studies show that 90 percent of bottled water and 83 percent of tap water contain plastic particles.

Source: *The State of Plastics*

Landfills are not much better. As it moves to landfills, lighter plastic such as polythene bags often flies off in the wind and ends up around drains, from where it enters rivers and ultimately oceans. Same story with litter. Rainwater and wind send plastic litter into streams and rivers, from where, once again, it ends up in the oceans.

Plastics are non-biodegradable, which means, unlike orange peels or bread crusts, bacteria cannot break down current generation of plastics into a harmless substance. In other words, plastic waste can take centuries to decompose, and, in the process, could leak harmful chemicals into the soil and water. There's a silver lining, though: scientists are coming up with amazing solutions.

Instead of decomposing harmlessly, plastic

slowly breaks down into smaller pieces called microplastics (measuring less than 5 mm in diameter), which are even harder to clean up.

Microplastics are extremely dangerous, as fish and other marine animals have been known to eat them. This is not cool at all, either for their health or ours, because quite often fish who ate microplastics become part of our dinner. Our daily table salt contains nano particles of plastic.

### DID YOU KNOW?

We use 5 trillion plastic bags...per year! That's 160,000 a second! And over 700 a year for every single person on the planet. We can do better than that. To see plastic bags used per year in real time Go to <https://bit.ly/2Vda09R> .

Recycling 1 tonne of plastic bottles saves 1.5 tonne of carbon and saves twice as much energy than burning it in an incinerator.



Over the past 20 years, entrepreneurs, companies and researchers have created a huge variety of biodegradable and/or compostable plastic substitutes. Everything from edible six pack rings to grocery bags made from shellfish shells—it's all out there.

Source: *CleanSeas Back to School Plastic Challenge* - <https://bit.ly/2RBj2qo>

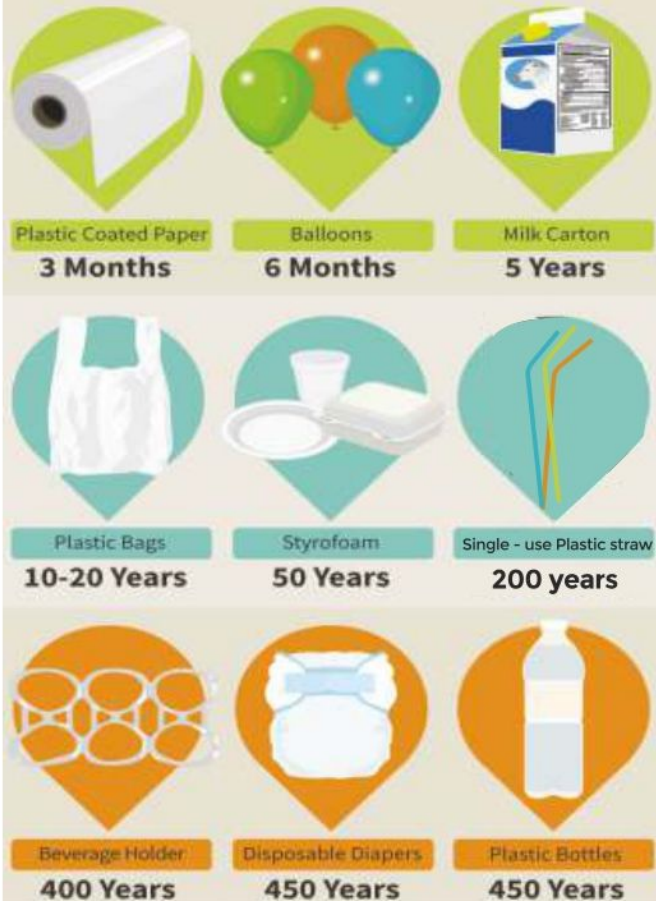
### The surprising uses of banana peels

Cartoon characters slip on them all the time. But they're good for something even more important: Insulating electric cables instead of using plastic. Who would've thought? Fortunately for us, 16-year-old Elif Bilgin from Turkey did think. She also developed her award-winning idea, not giving up even after 10 failed trials.

Learn more: <https://bit.ly/1a4nr3h>



### HOW LONG Until It's Gone?



Source: [www.epa.gov](http://www.epa.gov) • [www.fda.gov](http://www.fda.gov) • [www.nra.gov](http://www.nra.gov) • [bagsandbags.com](http://www.bagsandbags.com)

## Single-use, so much to lose



Nearly one-third of the plastic packaging we use ends up clogging our city streets and polluting our natural environment.

■ Every year, up to **8 million tonnes of plastic leaks** into our oceans where it endangers marine wildlife. That's the same as pouring an entire garbage truck of plastic into the ocean **every minute**.

■ By 2050 there will be more plastic in the oceans than there are fish (by weight)

**Sources:** [www.worldenvironmentday.global/en/about/beat-plastic-pollution](http://www.worldenvironmentday.global/en/about/beat-plastic-pollution) and [www.earthday.org](http://www.earthday.org))

[https://en.wikipedia.org/wiki/File:More\\_Plastic\\_in\\_the\\_Ocean\\_than\\_Fish\\_Infographic.png](https://en.wikipedia.org/wiki/File:More_Plastic_in_the_Ocean_than_Fish_Infographic.png)

Whew! That's a lot to take in. But the great part is, each and every one of us can do something to tackle plastic pollution.

And we're going to start right now.

### World Cleanup Day is a thing!

Did you know there's a day dedicated to making the world cleaner? A whole global movement comes together to take action and do something about the waste in their backyard. Cleaning up your room might be a bore but cleaning planet earth is fun – especially when you're joining forces with millions of people in 150 countries around the world. Join the fun on 21 September 2019:

[www.worldcleanupday.org](http://www.worldcleanupday.org)

<https://oceanconservancy.org/trash-free-seas/international-coastal-cleanup/>



### Earth needs to look #instaready too!

The beauty industry has been in the spotlight lately for its rampant use of plastics. From microplastics in facial scrubs to excessive plastic packaging to the practically indestructible facial and wet wipes, a wide range of beauty products are wreaking havoc on the planet. We all need to choose our products more carefully—find tips in Appendix 3 of the badge. We can't be making ourselves look good while ruining the Earth's natural beauty.



Learn more at: <https://www.teenvogue.com/story/the-beauty-industry-has-a-plastics-problem?verso=true>.







## Activity 1 - Audit Your Plastic Footprint

Start your war on single-use plastics by first assessing where you stand with the audit below.

Circle the plastic objects that you have used in past 2 months, place a check by the frequency of use and the sources from where it reaches you

POLY BAG	PET BOTTLE	PLASTIC STRAW	PLASTIC CUPS
			
<ul style="list-style-type: none"> <li>■ Daily</li> <li>■ Once a week</li> <li>■ Once a month</li> <li>■ Once in past 2 months</li> </ul>	<ul style="list-style-type: none"> <li>■ Daily</li> <li>■ Once a week</li> <li>■ Once a month</li> <li>■ Once in past 2 months</li> </ul>	<ul style="list-style-type: none"> <li>■ Daily</li> <li>■ Once a week</li> <li>■ Once a month</li> <li>■ Once in past 2 months</li> </ul>	<ul style="list-style-type: none"> <li>■ Daily</li> <li>■ Once a week</li> <li>■ Once a month</li> <li>■ Once in past 2 months</li> </ul>
<ul style="list-style-type: none"> <li>■ Vegetable vendor</li> <li>■ Restaurant</li> <li>■ Railway station, bus stop, or airport</li> <li>■ Stores/shops</li> <li>■ Street vendor</li> <li>■ Anywhere else (specify)</li> </ul>	<ul style="list-style-type: none"> <li>■ Vegetable vendor</li> <li>■ Restaurant</li> <li>■ Railway station, bus stop, or airport</li> <li>■ Stores/shops</li> <li>■ Street vendor</li> <li>■ Anywhere else (specify)</li> </ul>	<ul style="list-style-type: none"> <li>■ Vegetable vendor</li> <li>■ Restaurant</li> <li>■ Railway station, bus stop, or airport</li> <li>■ Stores/shops</li> <li>■ Street vendor</li> <li>■ Anywhere else (specify)</li> </ul>	<ul style="list-style-type: none"> <li>■ Vegetable vendor</li> <li>■ Restaurant</li> <li>■ Railway station, bus stop, or airport</li> <li>■ Stores/shops</li> <li>■ Street vendor</li> <li>■ Anywhere else (specify)</li> </ul>
<b>Where does it go after use?</b>			
<ul style="list-style-type: none"> <li>■ Segregated waste</li> <li>■ Given to Scrap dealer, recycler or Kabadi</li> <li>■ Landfills or Dump sites</li> <li>■ Neighboring water body</li> <li>■ As waste on the streets</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregated waste</li> <li>■ Given to Scrap dealer, recycler or Kabadi</li> <li>■ Landfills or Dump sites</li> <li>■ Neighboring water body</li> <li>■ As waste on the streets</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregated waste</li> <li>■ Given to Scrap dealer, recycler or Kabadi</li> <li>■ Landfills or Dump sites</li> <li>■ Neighboring water body</li> <li>■ As waste on the streets</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregated waste</li> <li>■ Given to Scrap dealer, recycler or Kabadi</li> <li>■ Landfills or Dump sites</li> <li>■ Neighboring water body</li> <li>■ As waste on the streets</li> </ul>
<b>Two things you can replace it with and cut down usage?</b>			
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BALLOON	TAKE AWAY SINGLE USE	FOOD PACKAGING	STYROFOAM PACKAGING
			
<ul style="list-style-type: none"> <li>■ Daily</li> <li>■ Once a week</li> <li>■ Once a month</li> <li>■ Once in past 2 months</li> </ul>	<ul style="list-style-type: none"> <li>■ Daily</li> <li>■ Once a week</li> <li>■ Once a month</li> <li>■ Once in past 2 months</li> </ul>	<ul style="list-style-type: none"> <li>■ Daily</li> <li>■ Once a week</li> <li>■ Once a month</li> <li>■ Once in past 2 months</li> </ul>	<ul style="list-style-type: none"> <li>■ Daily</li> <li>■ Once a week</li> <li>■ Once a month</li> <li>■ Once in past 2 months</li> </ul>
<ul style="list-style-type: none"> <li>■ Vegetable vendor</li> <li>■ Restaurant</li> <li>■ Railway station</li> <li>■ Grocery Store</li> <li>■ Street vendor</li> <li>■ Anywhere else (specify)</li> </ul>	<ul style="list-style-type: none"> <li>■ Vegetable vendor</li> <li>■ Restaurant</li> <li>■ Railway station</li> <li>■ Grocery Store</li> <li>■ Street vendor</li> <li>■ Anywhere else (specify)</li> </ul>	<ul style="list-style-type: none"> <li>■ Vegetable vendor</li> <li>■ Restaurant</li> <li>■ Railway station</li> <li>■ Grocery Store</li> <li>■ Street vendor</li> <li>■ Anywhere else (specify)</li> </ul>	<ul style="list-style-type: none"> <li>■ Vegetable vendor</li> <li>■ Restaurant</li> <li>■ Railway station</li> <li>■ Grocery Store</li> <li>■ Street vendor</li> <li>■ Anywhere else (specify)</li> </ul>

**Where does it go after use?**

<ul style="list-style-type: none"> <li>■ Segregated waste</li> <li>■ Given to Scrap dealer, recycler or Kabadi</li> <li>■ Landfills or Dump sites</li> <li>■ Neighboring water body</li> <li>■ As waste on the streets</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregated waste</li> <li>■ Given to Scrap dealer, recycler or Kabadi</li> <li>■ Landfills or Dump sites</li> <li>■ Neighboring water body</li> <li>■ As waste on the streets</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregated waste</li> <li>■ Given to Scrap dealer, recycler or Kabadi</li> <li>■ Landfills or Dump sites</li> <li>■ Neighboring water body</li> <li>■ As waste on the streets</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregated waste</li> <li>■ Given to Scrap dealer, recycler or Kabadi</li> <li>■ Landfills or Dump sites</li> <li>■ Neighboring water body</li> <li>■ As waste on the streets</li> </ul>
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**Two things you can replace it with and cut down usage?**

1. From your responses above, answer the following questions-

<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
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■ How many single-use plastic items have you **not** used in the past 2 months?

- 1-3
- 4-10
- More than 10

■ Which is the most common source of single-use plastic for you?

■ Where does most plastic you use eventually end up?



## Badge Activities

### Learning Outcome 3 & 4

Enough talking. It's time to act. Here is the first set of challenges to get you started on your Plastic Tide Turner journey.

### A. Entry level

These activities will get you thinking about how you can reduce your use of single use or disposable plastics in your daily life and start getting others to do the same.

**Get a score of 50 or higher and you'll be ready for the Leader Level challenges next!**

**A.1 Audit your plastic habit (mandatory activity):** Does plastic rule your life or is your plastic footprint microscopic? Or are you somewhere in the middle? Assess your ability now to cut down your plastic usage. That means reducing, reusing or replacing your plastic items. For example, replacing plastic tumblers with reusable metal or glass ones; carrying cloth bag instead of plastic bag. What alternatives to disposable plastic did you end up using? Upload photos on the google link at the end of this activity. Use the template on the previous page to audit your plastic footprint.

If the audit reflects your ability to cut down your plastic usage by

- 15 - 30% : **10 points**
- 31 - 45% : **15 points**

### Share! Show off! You're a tide turner!

Completed any of the challenges yet? Make sure you shout about it and let the world know! What was fun about the challenge? What was not so great? Did you learn something that surprised you? Did you inspire anyone else? Share your photos, videos and stories through the google form links shared with you.

- 46 - 60%: **25 points**

**A.2 Movie night:** Here's a fun way for you to learn more about the plastics problem: watch a movie! Here are a couple of them worth checking out:

- **Plastic Pollution: How Humans are Turning the World into Plastic** – an excellent film by Clean Seas that has been seen by 3.7 million people ([www.youtube.com/watch?v=RS7IzU2VJIQ](http://www.youtube.com/watch?v=RS7IzU2VJIQ))
- **Is this the ocean of the future?** – a short but moving look at how plastic is affecting our oceans ([www.youtube.com/watch?v=xKzqLdkuj6I](http://www.youtube.com/watch?v=xKzqLdkuj6I))

Watch one of them and then share the link with friends within your on / offline community using the #Plasticchallenge hashtag. Ask them to watch it and include a personal message about why you think it's important. Discuss the movies with friends after everyone has watched it. Upload your entries on <https://www.ceeindia.org/tideturners/>

- Watch one movie: **10 points**
- Watch both movies: **15 points**
- Hold a movie screening for at least 5 people for either or both movies: **25 points**

**A.3 Play the game:** Play the computer game Dumb Ways to Kill the Ocean and get a certificate for your hard work!

Game 1 - <https://gamingfortheoceans.org/game/index.html>

Game 2- <http://images.nationalgeographic.com/wpf/media-content/richmedia/1/1143/project/dist/desktop.html>

- Play the game at least once: **5 points**
- Upload your photo of playing the game

**A.4 Plastic resolution:** Take a pledge to cut or at least reduce your plastic footprint and convince 5 of these friends to do the same. Go to <http://earthhour.wwfindia.org/giveup/paper-3/plastic.php> and take your pledge to Give Up plastics to give back to nature

- You took the pledge: **10 points**

- You convinced 5 of your friends to take the pledge: **15 points**
- You convinced 10 or more people of your community to take the pledge: **25 points**
- Upload photo for each to grab points

**A.5 Role play. Plastic pollution**—and fighting plastic pollution—affects everyone in a different way. For example, a shopkeeper might be worried about a ban on plastic shopping bags if no cheap alternative is available. Ocean wildlife, on the other hand, would be pretty happy with a ban on all single-use plastics. A mayor or local councilor might want to tackle plastic waste to make the area beautiful and encourage tourists. But it's also expensive to provide more garbage bins and recycling services. In this activity, you will try to see the issue from someone else's point of view. In your classroom or group divide into groups of four, with everyone playing a different role. You can choose between the roles of plastic manufacturer, tourist, local resident, politician, storekeeper, young person, and fish. Have a discussion about plastic waste and plastic pollution, with everyone getting a chance to share their point of view and the particular challenges they face in this situation. What does each of you want? Whose situation seems more urgent? Is it possible for everyone to be happy? What solution(s) did you come up with? Regroup as a whole and discuss the outcomes of the role play.

- Upload the script of the play: **10 points**
- Upload the video of the performance before an audience: **15 points**
- Upload the script and the video of the performance: **25 points**



**A.6 Plastic Quiz** - You have been through a learning experience by undertaking the above activities. Your learning does not limit to the resources available in this toolkit. Step out and explore your surroundings and delve deeper into the real issues in your neighbourhood, understand the causes and begin with bringing about a change at individual level.

It is time to find out what you have learnt about plastics through the challenge and the progress of our actions. Take the quiz and earn score points to graduate to the Leader level of the challenge.

You earn the following score points for your correct responses:

3-5 correct responses : **10 points**

6-8 correct responses : **15 points**

9-10 correct responses : **25 points**

**Great work! You've completed the Entry Level activities. How'd you score?**

**50:** Move on to the Leader Level

**100:** Nailed it

**125:** Rockstar

**Share with us how you got on with the challenges and then get ready for the next level! Visit the Level 1 google form link provided to you.**



Click on the link given below to upload your Entry Level activity details-

<https://forms.gle/U3VFuBKafnnK996Q9>

Every year, World Migratory Bird Day presents an annual theme aiming to raise awareness of issues affecting migratory birds and to inspire people and organizations around the world to take measures for their conservation. This year's theme – "Protect Birds: Be the Solution to Plastic Pollution!" – will put the spotlight on the negative impact of plastic pollution on migratory birds and their habitats.

Discover more at: <https://bit.ly/2uJ7AF9>

Learning Outcome 1

## Background Information

Before you embark on the next level of challenges, let's learn a bit more about plastic pollution.

### Why does plastic pollution matter?

So, there's tonnes of plastic. Why is that such a big deal?

Only because it hurts pretty much everyone on the planet.

But don't take our word for it.

### Six ways plastic waste hurts the planet

#### 1. Harming our marine friends



Had a bad meal lately? Ocean animals say “join the club.”

Many marine animals swallow plastic items or get trapped in them and often die as a result.

### Earth wants to know what feels so heavy

The **300 million tonnes of plastic waste** we produce each year, that's what. That's nearly the same as the weight of the entire human population!

Source: [www.unenvironment.org/interactive/beat-plastic-pollution](http://www.unenvironment.org/interactive/beat-plastic-pollution)



Around 11.1 billion plastic items are tangled in coral reefs—blocking their oxygen and light and releasing harmful chemicals.

#### 2. Spoiling our soil

Plastic waste takes its toll on land, too. Plastic from landfills leaks toxins into the soil and water, affecting the health of soil, plants, and soil dwellers like earthworms performing essential ecosystem services. By entering the soil, plastic—you guessed it—finds its way back to us via the crops we eat. Even cows have been known to eat plastic bags. In India as many as **20 bags per cow** have been found inside cow stomachs.



#### Kicking off a new look

Spanish football team Real Madrid's new kit is made completely from ocean plastic!

While India is not a top global consumer of plastics — 11 Kgs (<https://bit.ly/2TTDdXK>) of plastic are consumed per capita compared with 110 Kgs in the U.S. — it has poor rates (<https://bit.ly/2LgRV13>) of waste management.

Much of the country's recycling sector is informal and unregulated, operating without government oversight. Every day, India generates 1.5 Crore Kgs (<https://bit.ly/2PE9Mr6>) of plastic waste of which only 90 Lakh Kgs are collected and recycled, leaving the rest to pollute water, clog drains, kill cows and degrade soil.

Source: [https://www.huffpost.com/entry/single-use-plastic-ban-india\\_n\\_5b3a09b6e4b0f3c221a28a07](https://www.huffpost.com/entry/single-use-plastic-ban-india_n_5b3a09b6e4b0f3c221a28a07)



### 3. Cranking up climate change

Yep, plastic is behind climate change, too. Plastic is made from petroleum and making plastic products accounts for around 8 percent of the world's oil production. That figure is projected to rise to 20 percent by 2050 (*Source: World Economic Forum— [www.bit.ly/1Ou5wDU](http://www.bit.ly/1Ou5wDU)*). Drilling for oil and processing it into plastic releases greenhouse gases into the environment, which causes global warming and hence contribute to climate change. And wait, there's more. Even when it's just sitting around

#### No, you're not hallucinating...

The plastic waste items that can be used for road construction are various items like plastic carrybags, plastic cups, plastic packaging for potato chips, biscuits, chocolates, etc.

Source: <https://www.thebetterindia.com/43685/plastic-waste-in-road-construction-plastic-man-india-prof-vasudevan/>

### 4. Blocked drain, major pain

We're still going. Did you know that plastic waste can cause flooding in cities? The thing is, plastic bags clogs drains and waterways, which is a key cause of urban flooding in many countries such as India and Bangladesh.

### 5. Sick of plastic!

When plastic bags block sewage systems, this results in stagnant water that provides a breeding ground for mosquitoes and other pests. This situation can lead to the spread of malaria and other vector-borne diseases. (*Source: Single-Use Plastics—A Roadmap for Sustainability*)

### 6. Costing us big bucks

Cleaning up after ourselves is expensive. In fact, we spend billions each year dealing with waste. Single - use Plastic affects our economies in other ways, too, for example by discouraging tourism. Who wants to go visit places covered in plastic waste?



According to the State of Plastics report, "*Studies suggest that the total economic damage to the world's marine ecosystem caused by plastic amounts to more than \$8 billion every year.*"

Source: <http://worldenvironmentday.global/en/news/infographic-if-you-can%E2%80%99t-reuse-it-refuse-it>



**B. Leader level****Learning Outcome 3 & 4**

This level might be a bit harder, but the impact will be bigger, too! For these challenges, you'll team up with others and start making some noise at school and in your community.

**NOTE: you don't have to do all of these if they're not easy to do, but to pass you need a score of 65 or higher. Then you're ready for the Champion level challenges!**

**B.1 Organize an assembly / lesson on this issue:**

Identify a fantastic speaker / activist on the plastic pollution issue and ask them to give an assembly on the topic to inspire the whole school

Introduce Plastic Tide Turner at the end of the talk and describe your journey thus far. During the talk convince at least 40 attendees to register for the challenge. If you cannot find an expert on the subject, prepare a presentation yourself using

the information provided in the toolkit.

- Upload the invite and the presentation: **10 points**
- Upload the invite, presentation and list of attendees at the talk: **15 points**
- Upload the invite, presentation and list of individuals who registered for the challenge: **25 points** .

**B.2 Beat Plastic Pollution****Activity 1: Survey of plastics****Objectives:**

- Identify what plastics you are using
- Identify other single use or disposable plastics you encounter

**Completion time: 7 days**

**Instructions:**

1. Go on a plastic journey – Make a note of all the single-use plastic items you use throughout the day that are simply thrown away. You can use these notes to create a tally chart to record the number and types of items.
2. Take a quick look in your trash bin and see what is in there, or write down items before you throw them away – a tally chart next to the bin may be useful for this.
3. As the week progresses, keep track of the single-use plastic items you use (either on paper or on your phone). You could also tally up the numbers of each item you use. Do not miss including the single use plastic items that you may be using indirectly, for example your grocery may include plastic packaging which is discarded after transferring it to a storage container.
4. Fancy something a little more challenging? Go one step further and look at the various types of plastic and their uses. For example, a bottle lid and the bottle itself can be made of different types of polyethylene terephthalate, also known as PET. You can also investigate how a piece of plastic gets from your school into the ocean.



the waste with eco friendly alternatives outside their classroom.

Create an evaluation sheet for all groups and invite a senior teacher to judge the exhibits.

Earn **10 points** for each of the following-

- Circular with the signature of the Head of your institution.
- A photograph of the display and the pledge.
- Filled judgment sheet with the teacher's signature.

Upload the documents on <https://www.ceeindia.org/tideturners/> to secure points

**B.3 Poster Campaign:** Get creative and demonstrate hands-on leadership with a poster. Use your artwork to get people to think about changing their single-use plastic habits and keep the neighborhood clean. Mention 5 'To-Do's on the poster that can beat plastic pollution. Make sure the posters are made with eco friendly material. Display your poster in a public space. Talk to people around, educate them about the issue and run a signature campaign

- Make a poster: **10 points**
- Put the poster up in a public space: **15 points**. Do not forget to click a photo and upload.
- Share a video of 5 people signing the poster: **25 points**

**B.4 Changing minds:** Do you have a sibling who starts yawning when you talk about plastic pollution? A cousin who flagrantly trashes plastic instead of recycling? A friend who uses far more single-use plastic than necessary? Prepare a slideshow for them, with facts and photos about the problems with plastics. Afterwards, ask them if they learned anything new or if your presentation

made them care a bit more. If not, what would it take for them to change their ways? If yes, ask them to commit to one or two lifestyle changes that will make a difference. Follow up in a months' time to see if they have kept their promises. What have you learned about making people change their behaviours? Will they share your presentation with others?

- Share the presentation you gave to the group you are trying to influence: **10 points**
- The presentation includes testimonials from 2 individuals agreeing to change: **15 points**
- Share the presentation with testimonials and images of action taken by these 2 individuals: **20 points**

**B.5 Plastic Warriors:** You have been through a learning by undertaking the above activities. Your learning does not limit to the resources available in this toolkit. Step out and explore your surroundings and delve deeper into the real issues in your neighbourhood, understand the causes and begin with bringing about a change beyond individual level and include your family, neighbourhood and have your communities join the movement.

It is time to track your progress at the Leader Level of the challenge. Take the quiz and earn score points to graduate to the Champion Level of the challenge. You earn following score points for your correct responses:

- 3-5 correct responses : **10 points**
- 6-8 correct responses : **15 points**
- 9-10 correct responses : **25 points**

Great work! You've completed the Leader Level activities. How'd you score?

- 65:** Move on to the Champion Level
- 100:** Nailed it
- 145:** Rockstar

**Share with us how you got on with the challenges and then get ready for the next level!**

Visit the link given below to upload your Entry Level activity details

<https://www.ceeindia.org/tideturners/>



## Background Information

### How can the world solve plastic pollution?

#### Learning Outcome 2

Governments need to create strong policies that encourage a more circular way to design and produce/consume plastics. They also need to make sure all plastic products are properly labelled so everyone knows what can be recycled and how. They need to encourage and invest in research and innovation for new solutions, and to raise awareness amongst everyone about reducing or cutting out single-use plastics. The businesses, corporates, RWAs and institutions need to enforce these policies at the local level and make sure that plastic is consumed and disposed off responsibly. Tie up with local recyclers, mandating waste

segregation and periodic collection of plastic waste by the recyclers. Segregation at source is integral to a good waste management system. It improves collection and processing efficiency.

- So far, more than **60 countries** have introduced national laws on plastic bags and Styrofoam products.
- When you count regulations at local levels as well, there are more than **140 laws around the world** aimed at banning and discouraging the use of **plastic bags** and **Styrofoam**.
- Mostly, it's too soon to say if the laws are actually working. But in **30 percent** of cases, dramatic drops in plastic pollution and plastic bags usage have already been reported.

The Ministry of Environment, Forest and Climate Change, India has notified the Plastic Waste Management (Amendment) Rules 2018 which includes phasing out of MLP- Multi-Layered Plastic is widely used in food packaging industries. These rules came into existence to give thrust on plastic waste minimization, source segregation, recycling, involving waste pickers, recyclers and waste processors in collection of plastic waste fraction either from households or any other source of its generation or intermediate material recovery facility and adopt polluter pay principle for the sustainability of the waste management system.

Source: <http://www.indiaenvironmentportal.org.in/content/454052/plastic-waste-management-amendment-rules-2018/>

Reference : <http://cpcb.nic.in/displaypdf.php?id=cGxc3Rpy3dhc3RlLlBXTV9HYXpldHRlLnBkZg>



#### Share! Show off! You're a tide turner!

Completed any of the challenges yet? Make sure you shout about it and let the world know! What was fun about the challenge? What was not so great? Did you learn something that surprised you? Did you inspire anyone else? We want your photos, videos and stories!

Tag us at @UNEnvironment @WWFINDIA and @ceeindia and use the hashtag #CleanSeas. Or email us at: [unenvironment-yea@un.org](mailto:unenvironment-yea@un.org)

As India progresses towards a circular economy, there is need to transition towards improved waste management systems with increased emphasis on information, education, and communication (IEC) amongst its citizens on the issues relating to plastic waste management.

Source: [https://www.teriin.org/sites/default/files/2018-06/plastic-waste-management\\_0.pdf](https://www.teriin.org/sites/default/files/2018-06/plastic-waste-management_0.pdf)

## Badge Activities

**Learning Outcome**  
3,4 & 5

**C. Champion Level: scale-up your efforts**

**Get a score of 80 or higher to be a Champion!**

This level is for those who want to be Champions on Plastic. You will have had such success at the Leader level, that you're ready to scale-up your efforts to either an organization, community, city or national level to make an even greater impact. These challenges require you to be:

- polite
- inspiring
- smart: focus on how you can have the greatest impact

### Creating behaviour change

Wanting to change the world (for better) is always great but it's never easy. Most people are too slow to change. Turtle by the way is a victim of disposable plastic bags - so many are die eating them thinking it is jelly fish .. Work as a team and support one another. Before getting started, think hard about how to make your projects successful.

The following may provide some food for thought:

- **Be specific.** E.g., instead of saying "use less plastic," you could advise others to "start carrying a reusable water bottle around."
- **Action planning.** Help the people you're working with create a realistic plan that can work.
- **Paying attention to current behaviour.** It helps when people start thinking about how they do things and how they could/should change.
- **What's getting in the way?** Everyone has a ton of excuses. No time, no money, not enough info. Be prepared for this and arm yourself with helpful alternatives and information.
- **Putting words into action.** Talking about stuff isn't enough. Getting others to try things out for themselves helps them take the plunge and has more impact.
- **Spending time in nature.** Get your friends off their phones and in the fresh air. Feeling more connected with nature makes people want to look after the planet and keep it beautiful.
- **Saying it out loud.** Try to get others to make public commitments about tackling plastic pollution. Making promises makes it more likely they will keep their word.
- **Share, share, share.** Encourage everyone to spread the word through their networks and communities. People are more likely to listen to what a friend has to say than a politician or some random official.
- **Keeping an eye on things.** Making a start is one thing, but how to make sure people keep up their good behaviour? Follow up with them, send them reminders, prompts, and maybe even start a system of rewards.

Adapted from *Making It Count—Increasing the Impact of Climate Change and Food Security Education Programmes.*

### C.1 Plastic Waste Management Champs:

Create a plastic collection scheme at school or in your community. If there is no waste management in your community / locality, raise this concern with your local official and work with partners and private sector collaborators to create a solution. To be truly successful, this challenge should benefit at least 100+ people in an area which would see a new community mechanism to reduce plastic waste in their area, with someone to come and collect it and take it away. While working on this, make sure you know what is collectable and has value, and what can't be reused. As a next step, you and your team could set up an environmental club at school that can make sure the waste management scheme continues. Take photos to capture the difference before and after you launched the project.

- Share a copy of the letter you sent to the local residential society official sharing concern: **10 Points**
- Send the official the minutes of the meeting over email, save the email and share it: **15 points**
- Share a visual of the change depicted through a picture of before and after: **25 points**

**C.2 Plastic Persuasion:** Select 2 companies / shops / RWAs / hotels that you like and regularly visit. Ask them to reconsider the plastic that they use, sell or provide on their premises and discuss whether alternatives could be used instead. Think about how you can best influence them. For example, have other businesses scored goodwill points by making this change? Do customers prefer sustainable alternatives to plastic? Is plastic pollution hurting tourism and therefore business in your region? Let them know of available alternatives that they could consider. To pass this section, one company should have changed their policy.

- Share the details of the individuals you contacted (Name of the person,



details of business, address etc.) : **10 Points**

- Document and share the plan you suggested them: **15 points**
- Picture of change that took place through persuasion: **25 points**

**C.3 Commit to a river or beach for at least 1 month:** Identify one location that is near you that has a major plastic / waste problem and commit to keep it clean for at least one month. Bring your friends along, as well as a local politician and the media, to join your cleanup and showcase its success.

- Make noise for the clean up on all social media and share the links: **10 points**
- Collage of captioned images of one clean up with date and location mentioned: **15 points**
- Collage of captioned images of 2 clean ups with dates and locations mentioned: **25 points**

**C.4 Take it to the Head of your School/ College:** With friends, identify a key issue that you think the head of your school/college would consider taking action to resolve. Then, (politely) raise this directly with them, pointing out the consequences and support for action on this issue. To pass this section, you will need to have written a persuasive letter, explored a meeting or call with the individual, and tried your best to influence them about the alternative. Make sure you take a selfie with him/her!!

- Send a letter outlining a plastic issue to your school or college principal and share a copy of the same: **10 points**
- Send a response from your principal along the picture that you took with him: **15 points**

- Share a copy of circular issued by your institution on implementation: **25 points**

**C.5 Audit your plastic habit and find out where your waste goes:** As a group, with friends or your class at school, use the **Clean Seas guide** to audit your plastic habits and take action to reduce your plastic usage. Can you—both individually and collectively—manage a 50 percent reduction of plastic use? This will mean reducing, reusing or replacing your plastic items. Create a blog or Instagram campaign to highlight your progress and share it with the wider community.

- If the audit reflects that you managed to cut down your plastic usage by -
- 15-30% - 10 points
- 31 - 45% - 20 points
- 46-60 % - 35 points

**Great work! You've completed the Champion level activities.**

**How'd you score?  
100 and above: You are a Plastic Tide Turner Champion!**

Click on the link given below to upload your Champion Level activity details-

<https://www.ceeindia.org/tideturners/>



## Wrap up

### Now tell us how you did...

#### 1) After badge quiz: 10 compulsory questions

Well done for completing the Leaders Plastic Challenge – you are now a fully signed up Plastic Tide Turner – yay! Before forging ahead, please take the following final 12 quick questions. Doing so will give us an idea of how this experience has helped you.

**Leader Code:** .....

#### Circle the most appropriate option in the table below.

1.	In the past month, have you avoided eating at places that serve food with single-use plastic spoons & forks ?	Yes	No	Not Sure
2.	In the past month, have you avoided using single use plastic bag?	Yes	No	Not Sure
3.	Sheila drinks water from a disposable plastic cup. Is this a good idea?	No	Yes	I don't know
4.	Do you like to drink juice and soft drinks with a plastic straw?	No	Yes	No preference
5.	The take away food that Anubhav orders comes in a disposable plastic container. Do you think he should continue ordering from that restaurant?	Yes	No	Not sure
6.	Do you believe you can change the way your friends and family use single use plastics in their everyday lives by talking to them about the issues around plastic?	Disagree	Agree	Not Sure
7.	Have you ever spoken to your scrap dealer or raddiwala or kabadi about how and where they dispose the scrap they collect?	Yes	No	Don't Remember
8.	If you have to use single-use plastics, are you aware of the correct ways of disposing them?	Yes	No	Not Sure
9.	Vidur organized a community clean up with a small group of people. Have you ever organized a clean-up drive or participated in one?	Yes	No	Not successfully
10.	Mita convinced her local grocery store to give up polybags. Have you ever discouraged a vendor in the local market to do so?	Yes	No	Not successfully
11.	Does your family practice segregation of wet and dry waste at home?	Yes	No	Not sure



## 2) Now tell us your story:

The next step is to consolidate what you've learned from this whole experience and write a short story that helps us understand what change you made in your life, and others. Consider questions such as, what were the main challenges? What part was most fun? What did you realize that you didn't know before? What were you able to teach others about? Where do you think you had the biggest impact?

Here are some suggestions for how to get your ideas across:

1. **Write** an essay
2. **Make** a video
3. **Do** a photojournalism piece

Share these with us by uploading the same on the google form link provided to you.

## 3) Pledge

Let's all make a commitment to making the planet happier and healthier, helping our animal friends, and improving our own health and quality of life. Let's kick single-use plastic to the curb (not literally)!

### I WILL

- Always carry a reusable bag and say 'no' to single-use shopping bags.
- Carry my own refillable bottle
- Educate my friends and family about the issues related to single-use plastics
- Convince my local shopkeepers/vendors and communities to say no to single-use plastic

## 4) Now get your badge

Hey **Tide Turners!** You've done amazing work and we'd love to send you your certificate and badge to celebrate what you've accomplished.



## Appendices

### Appendix 1

#### Learning Outcome 2

#### What are world leaders doing about plastics?

Smile, y'all. We promised you good news and here it is. All over the world, people are joining forces to reduce plastic waste. Let's check out some of what's been happening.

#### What do you do when someone tags you in a photo that's not your best?

- **Unfriend.** That's also what many governments are deciding to do with single-use plastics.
- In Africa, **25 countries** have introduced **bans on plastic bags** and more than half of them kicked off the ban between 2014 and 2017.
- The **European Union parliament** has voted to **ban single-use plastics**, and if all goes according to plan, it will take effect by 2021.
- **Costa Rica** is on a mission to be the first country in the world to eliminate **single-use plastics by 2021**.
- **New York City, USA**, banned all Styrofoam products in 2017.
- **India** has vowed to eliminate all single-use plastics by 2022. In addition, several states and cities in the country have introduced bans on plastic carry bags and other plastic materials.
- **Japan** is an interesting example, where, with no bans on single-use plastic, they still manage relatively little plastic pollution. How're they pulling it off? Thanks to a very effective **waste management system** and a population that largely cares about the planet.

Learn more about what governments around the world are doing about plastic in Chapters 3 and 4 of *Single-Use Plastics—A Roadmap for Sustainability*.



#### UN Environment Clean Seas campaigns



#### #CleanSeas

In February 2017, UN Environment launched the *Clean Seas campaign* to bring together governments, the general public and the private sector to fight marine plastic pollution. So far, more than 57 countries have joined the movement, and companies are entering the fray, too. In fact, Volvo Cars has announced that, starting in 2025, at least 25 per cent of the plastics used in new Volvo car models will come from recycled materials. Regular people can join, too! *Find inspiration* in the story of one young man who launched the world's largest beach cleanup. Then *take the pledge* and join the movement.



#### The Food and Agriculture Organization is working on better food packaging

A big share of plastic packaging comes from food in developing countries. The Food and Agriculture Organization of the UN (FAO) is working on ways to replace plastic packaging with packaging made out of biomass. This could include packaging made from tree fibers, corn starch, potatoes and food waste. Making the switch will help us move away from polluting plastics. It will also provide a nice circular solution, because when bio-based packaging reaches its *end-of-life stage* it can be used for composting.

Adapted from the FAO report *Bio-based food packaging in Sustainable Development*: [www.bit.ly/2t8m9RB](http://www.bit.ly/2t8m9RB)

Learn more about FAO's work on creating a *bio-based, reuse economy*: [www.bit.ly/2ROcxFS](http://www.bit.ly/2ROcxFS)



## Appendix 2

### Working with partners: plugging into a bigger effort

Another great way to have impact is by joining forces with others. Anyone can join in – the bigger the group, the bigger the change. Check out these organizations and initiatives that are working on reducing plastic waste. They would love some help from plastic tide turners around the world.

#### **Centre for Environment Education (CEE), India**

– Build on your knowledge of plastic waste with CEE's array of resources and find ways to get involved.

#### **Food and Agriculture Organization of the United Nations (FAO)**

– FAO is working hard on different solutions to plastic waste, including finding sustainable alternatives to plastic packaging. Get the scoop on progress so far.

#### **FAO Youth and United Nations Global Alliance**

– If you care about the environment and development, this is the place for you. Find loads of ways to get involved and team up with young people around the world.

**Junior Achievement** – Learn leadership and other practical skills with help from Junior Achievement's range of programs.

**Planet or Plastic?** – This platform from National Geographic will help you learn more, find more ways to reduce your use of single-use plastics and take a global pledge.

**UN Environment** – Get the latest on UN Environment's work on protecting the planet and get involved through a range of different campaigns.



#### **World Association of Girl Guides and Girl Scouts (WAGGGS)**

– Find exciting opportunities to participate in global and regional events.

**World Organization of Scout Movement (WOSM)** – Find programs, events, and activities you can take part in and learn more about inspiring others to take action.

**Bharat Scouts and Guides (BSG)** 5.6 million Bharat Scouts and Guides (BSG) have pledged to #GiveUp their plastic woggles, a signature element of the BSG uniform, as a part of the Earth Hour campaign, replacing it with more sustainable and eco-friendly options.

**World Wide Fund for Nature (WWF)** – WWF has a commitment to 'No Plastics in Nature' by 2030 and is driving consumer awareness on the impact of plastics on people and nature. WWF is also working with companies on making commitments to recycling, reducing and finding alternatives to plastics.

## Appendix 3

### Plastics and the SDGs

#### How are they connected?

The Sustainable Development Goals (SDGs) are a set of 17 goals that the international community identified as our world's most pressing needs, which we need to achieve by 2030 to nail a more sustainable future for everyone.



It's not a stretch to say we can't achieve the SDGs unless we get a handle on our plastics problem.

As you know by now, plastics endanger wildlife, threaten human health, worsen problems like climate change, flooding, and disease, and cost our global economy billions each year. Good thing, then, that the people who designed the SDGs included a whole bunch of goals that are directly linked to plastics.

With everyone buckling up and getting to work on the SDGs, there's a lot of hope on the horizon that we'll all do something about plastic pollution and other global problems together.

The above SDGs are the ones most closely linked to plastic pollution. Learn more about specific targets within the SDGs that are relevant to plastic pollution on **page 21** of the publication: *Towards Responsible Use of Plastics—Reduce, Reuse, Recycle*: <https://bit.ly/2WCuTgx>



Notes

