



**PLASTIC TIDE TURNERS**  
**Challenge**  
**Badge**

**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 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 are 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 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 of action that will seek to reduce plastic waste where it matters most: upstream.

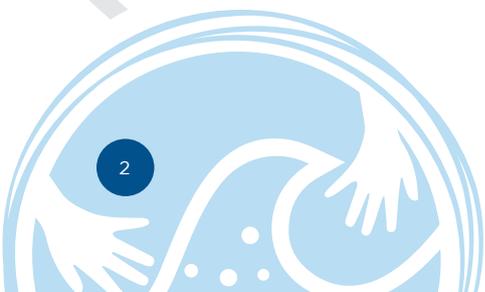
We're fortunate to have as beautiful a place as planet Earth to call home. And let's not forget, we share this home with wondrous plants and animals, all of whom are doing their part to keep the planet healthy and beautiful. Let's do our part too. Let's keep our oceans, forests, rivers, and roads picture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

## 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:

1. Understand how plastic is threatening life in oceans and on land;
2. Understand how the global community is tackling the issue;
3. Understand and act to reduce your personal use of single-use plastics;
4. Inspire your friends, family, school, and community to reduce, reuse and recycle single-use plastics;
5. Take the lead on a wider scale to create lasting change in your region or community related to the use of single-use plastics, marine litter and microplastics.



## About the challenge

The challenges are grouped into three levels—entry level (A), leader level (B), and champion level (C)—with background information in between that will help you learn more about specific issues related to 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: 10 compulsory questions before you start

You're joining in the Young Leaders Plastic Challenge—yay! Before forging ahead, please take the following 10 quick questions. Doing so will give us an idea of common practices, opinions, and trends around the use of plastic.

**Leader Code:** ..... (To be generated automatically)

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

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

**Age Group:**

**Gender: Male / Female**

7-10     11-16     17-25     26 and above

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

1.	In the past month, I have avoided eating at places that serve food with single-use plastic cutlery.	Yes	No	Not Sure
2.	In the past month, I have used single-use plastic bags	Yes	No	Not Sure
3.	John gets his household supplies in a plastic bag. Do you think this is right?	Yes	No	I don't know
4.	Sheila drinks tea in a plastic cup. Is this a good idea?	Yes	No	I don't know
5.	I like to drink soda with a plastic straw.	Yes	No	Not sure
6.	People view single-use plastic as a good thing. Do you share that view?	Agree	Disagree	Not Sure
7.	I can change the way my friends and family use plastics in their everyday lives by talking to them about the issues around plastic.	Agree	Disagree	Not Sure
8.	Sarah uses paper and cloth bags. Can you easily find paper or cloth bags or are you able to make a bag yourself?	Yes	No	Not Sure
9.	Are there any plastic recyclers in your area?	Yes	No	I don't know
10.	Do you think it is possible to manage without single-use plastic in our lives?	Yes	No	I don't know

Send your quiz response to: [unenvironment-yea@un.org](mailto:unenvironment-yea@un.org)

## Background Information

### The problem with plastics

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 reduce your use of plastic and get others to do the same. Hello, Captain No-Plastic!

#### Learning Outcome 1

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.

### 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 why is that 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 waaay more single-use plastics than we need.

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

Around the world,

**1 million**

plastic 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?

This badge is all about plastics, but what are they? 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 tons of plastic. What does that look like? According to one scientist, if you spread out **9 billion tons 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 tons** of plastic we've created has been recycled (turned into something reusable). Shame on us all!

### 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 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, plastic 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 un-biodegradable, which means, unlike say with orange peels or bread crusts, bacteria cannot break plastics down into a harmless state. In other words, plastic trash 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, neither for their health or ours, because quite often fish who ate microplastics become part of our dinner.

### China says no, everyone else says oh no

For decades, China has been importing plastic waste from Western countries, recreating items out of it for profit. But in November 2017, China said no thanks. Which means plastic waste is piling up at a much faster rate than before. Countries are struggling to find solutions. Tougher bans and closed loop systems on single-use plastics are one way to go.



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?



Plastic Coated Paper  
3 Months



Balloons  
6 Months



Milk Carton  
5 Years



Plastic Bags  
10-20 Years



Styrofoam  
50 Years



Rubber Boot Sole  
50-80 Years



Beverage Holder  
400 Years



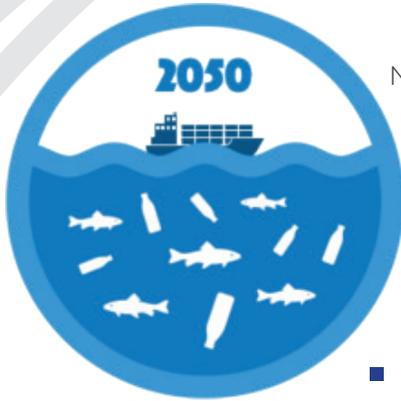
Disposable Diapers  
450 Years



Plastic Bottles  
450 Years

Source: [namepa.net](http://namepa.net) • [scdhec.gov](http://scdhec.gov) • [noaa.gov](http://noaa.gov) • [biogreenpackagingstore.com](http://biogreenpackagingstore.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 **13 million tons 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)

### 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/>



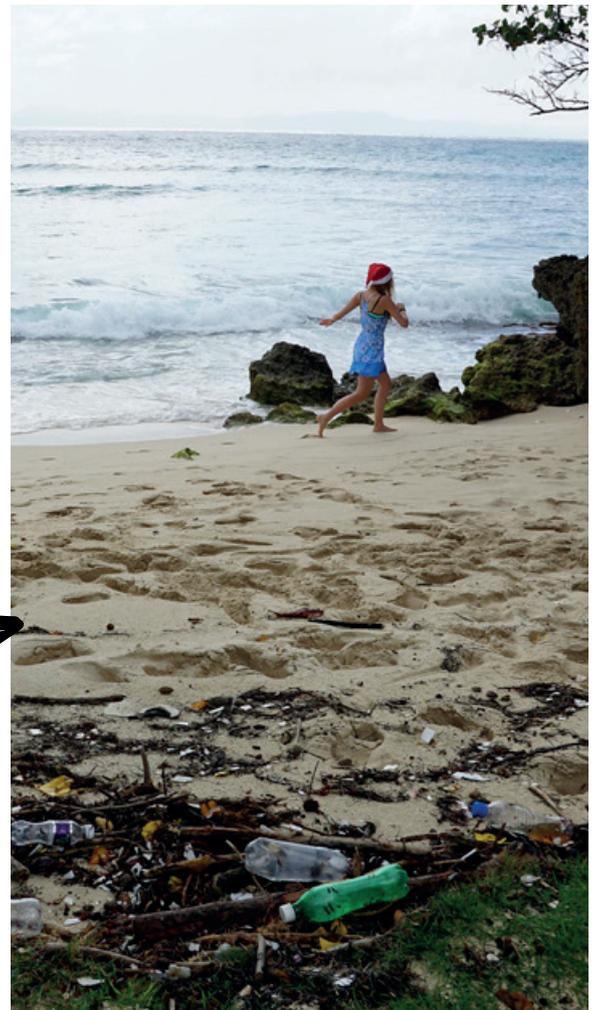
Whew! That's a lot to take in. But the great part is, each and every one of us can do something to tackle plastic pollution. And we're going to start right now.

### 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. Dude. We can't be making ourselves look good while ruining the Earth's natural beauty.



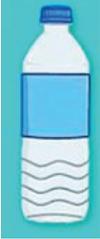
**Learn more at:** <https://www.teenvogue.com/story/the-beauty-industry-has-a-plastics-problem?verso=true>.



## Audit Your Plastic Footprint

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

1. 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 they reach.

Plastic Bags	PET Plastic	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>
Where does it go after use?			
<ul style="list-style-type: none"> <li>■ Segregate &amp; sent to recycler</li> <li>■ Junk dealer</li> <li>■ Landfill</li> <li>■ Neighboring water body</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregate &amp; sent to recycler</li> <li>■ Junk dealer</li> <li>■ Landfill</li> <li>■ Neighboring water body</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregate &amp; sent to recycler</li> <li>■ Junk dealer</li> <li>■ Landfill</li> <li>■ Neighboring water body</li> </ul>	<ul style="list-style-type: none"> <li>■ Segregate &amp; sent to recycler</li> <li>■ Junk dealer</li> <li>■ Landfill</li> <li>■ Neighboring water body</li> </ul>

Balloons	Single use Plastic	Plastic Sachet	Styrofoam
			
<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>
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1. From your responses above, answer the following questions:

- 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 of the plastic you use eventually end up?

## Badge Activities

### Learning Outcome 2 & 3

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 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? Take action now to cut down your plastic usage. That means reducing, reusing or replacing your plastic items.

- Cut 1 single-use plastic item from your life: **5 points**
- Cut 2 single-use plastic items from your life: **10 points**
- Cut 5 single-use plastic items from your life: **25 points**

What alternatives to plastic did you end up using?

**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 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 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 #CleanSeas hashtag. Ask them to watch it and include a personal message about why you think it's important. Discuss the movie with friends after everyone has watched it.

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

**A.3 Plastic resolution:** With 5 friends, talk through how you are each taking action to reduce your plastic habits and come up with 3 things that you can do collectively to make a difference. Use Whatsapp or a similar app to share photos and ideas and then re-group to check on your progress in 1 month's time. How much have you reduced your plastic use? Some ideas to get your wheels turning: Ditch plastic straws, bring reusable bags with you everywhere and bring your own containers when your order takeout. See APPENDIX 2 on page 22 for more ideas.

- Maintain the group and stick to its goals for one month: **5 points**
- Maintain the group and stick to its goals for two months: **10 points**
- Maintain the group and stick to its goals for six months: **20 points**

**A.4 Play the game:** Play the computer game Dumb Ways to Kill the Ocean and get a certificate for your hard work! <https://gamingfortheoceans.org/game/index.html>

- Play the game at least once: **5 points**

**A.5 Trash art:** Discover your creative side! Collect as much discarded plastic as you can and try to make art or a craft out of it. Can you make a cool collage? A bracelet?

### 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 and use the hashtag #CleanSeas.

A sculpture of the CleanSeas hashtag? If you and your friends enjoy the challenge, how about taking it bigger and organizing a craft fair at your school, showcasing the beautiful items you designed out of plastic waste? Here are some ideas to get your wheels turning: <https://bit.ly/2G66ACv>.

- Segregate and pick some of your household plastic waste before it reaches the trash bin: **5 points**
- Make a piece of art out of discarded plastics and share it on the hashtag: **10 points**
- Write a strong 15-word message inspiring people to segregate plastic waste, recycle it and display it along with your art: **20 points**

**A.6 Bag nag - making it simple:** Who does the grocery shopping in your home? Place a sign together with re-usable bags in the car or right by the door, so whoever does the shopping will have them on hand. Prepare a few sets of re-usable straws, cutleries, and food containers that your family members can keep on hand too, so they'll have no excuses next time they eat out or get takeout. Do an inventory of their toothpastes, face washes, etc., to check for microplastics and give them the names of some safe alternatives to buy instead. Can you think of other ways to make it easier for them to reduce their plastic footprint? After a while, did they start remembering to make these changes on their own?

- For each type of single-use plastic you get people to replace with a reusable item: **10 points**

**A.7 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 councillor might want to tackle plastic trash to make the area beautiful and encourage tourists. But it's also expensive to provide more trash 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 do 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.

Carrying out the role play: **10 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!**

## Background Information

### Learning Outcome 4

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

### Why does plastic pollution matter?

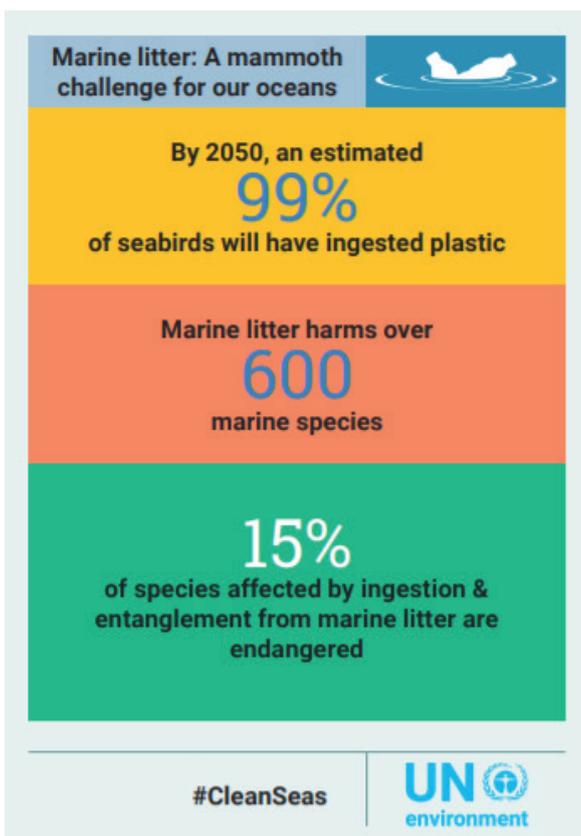
So, there's a ton of plastic. Why is that such a big deal?

Only because it hurts pretty much everyone on the planet.

But don't take our word for it.

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

#### Earth wants to know what feels so heavy

The **300 million tons 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)



#### 2. Spoiling our soil

Plastic 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 performing essential ecosystem services like Earthworms. 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 livestock farms in Nairobi as many as **20 bags per cow** have been found inside cow stomachs. Not good either for cows or for humans who eat beef or drink cows milk.



#### Kicking off a new look

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

#### Probably not worth breaking this law

Kenya introduced one of the world's toughest laws against plastic bags in 2017. Now, Kenyans who are caught producing, selling, or even using plastic bags will risk imprisonment of up to four years or fines of \$40,000.

Source: [GlobalCitizen.org](http://GlobalCitizen.org)



### 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 contributes to climate change. And wait, there's more. Even when it's just sitting around in seawater and sunlight, plastic releases greenhouse gases. Talk about the dangers of sunbathing!

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

Clothes made out of plastic water bottles and straws made out of seaweed? Innovators around the world are coming up with wacky ideas for a world without plastic waste.

Learn more at: <https://bit.ly/2qSgP3h>.



### 4. Blocked drain, major pain

We're still going. Did you know that plastic waste can cause flooding in cities? The thing is, plastic 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 trash. Plastic affects our economies in other ways, too, for example by discouraging tourism. Who wants to go visit places covered in plastic trash?



## Badge Activities

### Learning Outcome 5 & 6

You're now ready to take your fight against plastic to the next level! Jump right in...

### B. Leader level

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 Get your school on board:** With friends, ask your headteacher at school to conduct a plastic audit to determine how plastic waste is being created at the school and see how it can be reduced. Try to involve the wider student body. For example do **activities 1 and 2 (below)** from the *Clean Seas toolkit* together as a group, or watch one of the videos suggested in activity A.2. Next, get an expert to come and speak at your school and suggest ways that your school can cut its plastic waste.

- Everyone cuts 1 single-use plastic item: **5 points**
- Everyone cuts 2 single-use plastic items: **10 points**
- Everyone cuts 5 single-use plastic items: **25 points**



### Activity 1: Survey of plastics

#### Objectives:

- Identify what plastics you are using
- Identify other 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 number of each item you use.
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.





## Activity 2: Waste estimator

### Objectives:

- Estimate the amount of plastic waste produced
- Consider how this waste could be reduced

**Completion time: 7 days**

### Instructions:

1. Get each person in your class to collect their plastic waste for one week. You could have a separate box for plastic waste next to your trash bin at home or at school.
2. Weigh each person's plastic collection and then add up the combined weight to get the total amount of waste generated by your class in one week. Are there any other ways it could be measured? For example, if you do not have information from all the class members, you could calculate the average based on available information and multiply by the number of students in a class.
3. Brainstorm ideas about how the waste you produced could be reduced – not by recycling, but by reducing your use.
4. Fancy something a little more challenging? Design a competition to reduce the amount of waste – a 'Reduce the Use' challenge of your own. Try using collected plastic to make a sculpture or art competition that makes people aware of the pollution problem or how oceans are being polluted by plastic.



**B.2 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. Use the **#CleanSeas** hashtag to share your signs with us and – if it's legal – see if you can put up your signs in the places where the plastic pollution is at its worst.

- Make a poster: **10 points**
- Put the poster up in a public space: **15 points**

**B.3 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 month's time to see if they have kept their promises. What have you learned about making people change their behaviors? Will they share your presentation with others?

- Carrying out the slideshow: **5 points**
- At least one person said they learned something new due to the slideshow: **10 points**

- At least one person commits to a lifestyle change because of the slideshow: **15 points**
- At least one person shares your presentation with others: **20 points**

**B.4 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.

Organize a 20-minute talk: **20 points**

**B.5 Biggest plastic footprints?** Organize a “plastic face-off” between your class and another class in your school. Everyone in both classes will save the plastic they use over the course of the week, from plastic shopping bags to water bottles to food packaging. Have each class create a “mountain” of everything collected and, at the end of the week, do a comparison with a league table. Which mountain is bigger? What are the main items found in each? Follow up with a discussion. Did the activity make everyone think more about reducing their use of plastic? Did the final amount of plastic collected shock them? How about a second showdown to see which class manages to reduce their plastic use more and produce a smaller mountain?

- Organize a plastic face off: **10 points**
- Get your whole class to do a plastic face-off: **15 points**
- Get your whole school to do a plastic face-off: **25 points**

Repeat this in one month’s time.

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

**B.6 Picking up litter:** Spend one week picking up plastic you find littering your neighborhood or community. Take a photo or make a note to keep track of all that you find. How much of what you found could have been recycled instead? At the end of the week, compile your findings and send them to your local municipality with suggestions for how to improve things. Should they provide more trash and recycling bins? Should they have street signs telling people which items can be recycled and why it matters? Should they have signs reminding people not to litter?

**\*Please exercise safety and wear protective gloves – not plastic though (smiley face) - when doing this project**

**\*\* Younger participants may need adult supervision for this activity, to avoid picking up hazardous objects**

- Picking up plastic: **5 points**
- Getting a group to join you in community clean-up drive: **10 points**
- Picking up plastic and also writing to your municipality with suggestions: **20 points**

**B.7 Advocate.** Observe how your community deals with plastic. For example, could waste collection be improved? Should schools be doing more to raise awareness? Write a polite letter to your headteacher, official within your community or local politician and express your concern about plastic waste in the community. Make suggestions based on your observations about how to reduce waste in your area. Ask for their support with specific issues, like placing more recycling bins around town or helping to organize a cleanup. If they respond, offer to go and meet them and discuss this face-to-face to see what you can do together.

- Write a letter with suggestions: **10 points**
- Your letter makes a difference (e.g., improved recycling facilities): **20 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!**

## Background Information

### Learning Outcome 7

#### How can the world solve plastic pollution?

Governments need to create strong policies that encourage a more circular way to design and produce 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.

- 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 bag usage have already been reported.

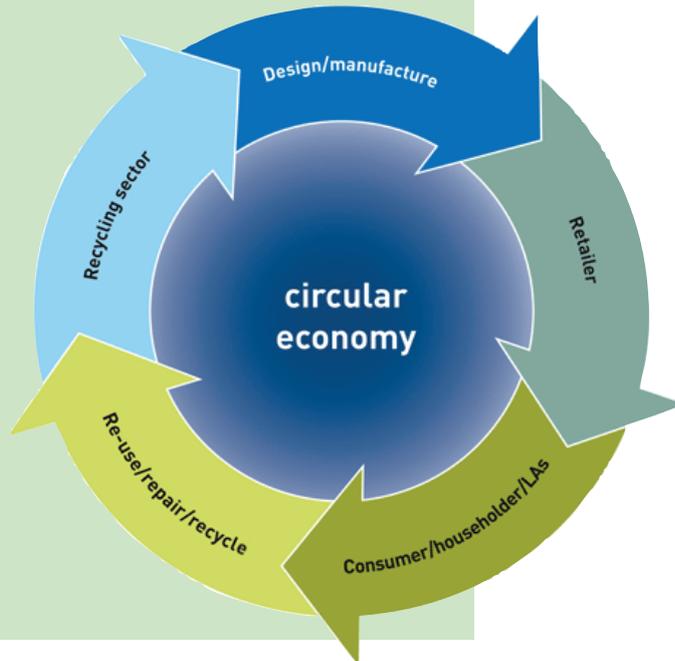
Where countries are reporting little or no impact, the main issues seem to be (i) lack of enforcement, and (ii) lack of affordable substitutes to plastic bags and Styrofoam.

#### This is not about geometry, honest

One of the most important aspects of sustainability is achieving a circular economy.

A circular economy is an alternative to the traditional linear way that economies work, in which we make stuff, use it, and dispose of it. In a circular economy, we hang on to and use resources for as long as possible, get the most value out of them, and then find ways to recover and regenerate products and materials.

Source: <http://www.wrap.org.uk/about-us/about/wrap-and-circular-economy>



## Badge Activities

**Learning Outcome  
8,9 & 10**

### 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 behavior change

Wanting to change the world (for better) is always great but it's never easy. Most people like to change their ways like a turtle likes a plastic bag (sorry—too soon?). 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 behavior.** 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 into 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 behavior? 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 Waste management (r)evolution:

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 to make sure the waste management scheme continues. Take photos to capture the difference before and after you launched the project.

- Raise concern with local official: **10 points**
- Collaboratively brainstorm solutions with relevant parties: **15 points**
- Set up an environmental club at school: **20 points**

### C.2 Private sector plastic persuasion:

Select 3 companies / shops that you like and regularly visit. Ask them to reconsider the plastic that they 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.

- Visit at least 3 shops and discuss plastic alternatives: **10 points**
- Get at least one shop to change its behavior on plastics: **20 points**

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

**C.3 Take it to your politician:** With friends, identify a key issue that you think the local politician or even minister 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 the politician too!

- Send a letter outlining a plastics issue to a local politician or minister: **25 points**
- Meet with politician or minister to discuss the issue in detail: **35 points**

**C.4 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.

- Commit to the cleanup for one month: **10 Points**
- Commit to the cleanup for two months: **20 Points**
- Commit to the cleanup for three months: **30 Points**

**C.5 Raise it in the media:** Whether it is activity 1,2,3 or 4, think through a media plan that can raise your activity with the media so that they can cover the work you're doing and share this with a much wider audience in your community. Think first about what the story is that you'd want to tell, what your message and goals are, and then identify who you think would be the most interested journalist to cover the work you are undertaking.

- Each article published on your activity: **15 points**

**C.6 Plastic surprises:** Work with a group of classmates for this one. Everyone researches one item that most people don't realize contains plastic. For example, did you know cigarette filters contain tiny plastic fibers? In fact, in a recent global survey, cigarettes were the most common type of plastic waste found in the environment. Other sneaky plastics can be found in chewing gum, clothing, glitter, and tea bags. Have everyone bring their example to school and get permission to set up an "exhibition" with your collected items in a prominent space, along with information about why it matters.

- Organize an exhibit: **20 points**

**C.7 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.

- Start auditing your plastic and continue to do so for a month: **10 points**
- Get 5 additional people to audit their plastic for a month: **20 points**
- Manage to reduce your plastic usage by 50 percent after a month: **30 points**

## 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 10 quick questions. Doing so will give us an idea of how this experience has helped you.

**Leader Code:** ..... (To be generated automatically)

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

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

**Age Group:**

**Gender: Male / Female**

7-10     11-16     17-25     26 and above

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

1.	In the past month, I have avoided eating at places that serve food with single-use plastic cutlery.	Yes	No	Not Sure
2.	In the past month, I have used single-use plastic bags	Yes	No	Not Sure
3.	John gets his household supplies in a plastic bag. Do you think this is right?	Yes	No	I don't know
4.	Sheila drinks tea in a plastic cup. Is this a good idea?	Yes	No	I don't know
5.	I like to drink soda with a plastic straw.	Yes	No	Not sure
6.	People often view single-use plastic as a good thing.	Agree	Disagree	Not Sure
7.	I can change the way my friends and family use plastics in their everyday lives by talking to them about the issues around plastic.	Agree	Disagree	Not Sure
8.	Sarah uses paper and cloth bags. Can you easily find paper or cloth bags or are you able to make a bag yourself?	Yes	No	Not Sure
9.	Are there any plastic recyclers in your area?	Yes	No	I don't know
10.	Do you think it is possible to manage without single-use plastic in our lives?	Yes	No	I don't know

Send your quiz response to: [unenvironment-yea@un.org](mailto:unenvironment-yea@un.org)

## 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 changes you made in your life, and in the lives of 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 emailing:

[unenvironment-yea@un.org](mailto:unenvironment-yea@un.org)

## 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 11

#### 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 world 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 carrier 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 are 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 clean-up. 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** (I'm not crying, *you're* crying) 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)



Food and Agriculture Organization of the United Nations



## 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.

**World Wide Fund for Nature (WWF)** – WWF is fighting for producers to take responsibility regarding plastic pollution. Join the fight, get interesting info, and sign up for updates.

## 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 peeps who designed the SDGs included a whole bunch of goals that are directly linked to plastics.

With everyone buckling down 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>



Food and Agriculture Organization of the United Nations



clean seas  
turn the tide on plastic



The Young Leaders Plastic Challenge

